OLDER PATIENTS AND THEIR DOCTORS

ANNOTATED BIBLIOGRAPHY

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In 1981 Marie Haug published the volume *Elderly Patients and their Doctors* which contained edited versions of presentations from a 1979 symposium on doctor-elderly patient interactions. Since that time, research on medical encounters in general, and encounters involving elderly patients in particular, has expanded and matured. The Task Force on Doctor and Patient of the Society for General Internal Medicine (SGIM), active for more than ten years, has expanded its mailing list to over 1300 interested persons. The Task Force coordinated the collection of 550 complete medical interviews for research analysis and maintains an annotated, computerized list of articles on the medical interview and the physician-patient relationship. In 1992, the Task Force on Doctor and Patient became the American Academy of Physician and Patient. While not focusing exclusively on research nor on communication with older patients, the growth of this organization is indicative of increased interest in issues surrounding the physician-patient encounter.

This bibliography is intended as a resource for scholars and policy makers interested in the doctor-elderly patient relationship with particular emphasis on the medical encounter. The temporal focus of our literature search was material published in the five years between 1987 and 1992, although some widely cited earlier items and some items published in 1993 are included. The year 1987 was selected because the Haug and Ory review article cited here dealt with material prior to that time. Inclusion criteria were as follows:

(a) publication in the English language

(b) empirical studies meeting widely-accepted scientific standards, or non-empirical papers that provide original perspectives on, or syntheses of, existing research.

(c) studies utilizing either quantitative and qualitative analytical methods.

(d) focus on the clinical encounter or data that is directly relevant to the clinical encounter, including research utilizing both direct (tape-recording) and indirect (self-report measures of communicative behaviors) techniques.

(e) studies examining an elderly population or utilizing age as a variable in analysis.

References were gathered by a Medline search using aging, elderly patients, communication, physician communication, physician-patient interaction, physician relations, elderly patients, medical interviews, patient satisfaction, patient compliance, patient recall and various combinations of these as key words; hand searches of such journals as *Health Communication*; materials sent by researchers who study physician-elderly patient communication; and items abstracted in the computerized database on doctor-patient studies at the University of Chicago Center for Clinical Medical Ethics. Annotations are intended to convey the method and content of the publication. They are primarily descriptive rather than analytical, and do not judge explicitly the quality of the research.

Adelman, R. D., Greene, M. G. & Charon, R. (1987). The physician-elderly patient-companion triad in the medical encounter: The development of a conceptual framework and research agenda. *The Gerontologist*, *27*, 729-734.

This article presents a conceptual framework for understanding a companion's presence in medical encounters of physicians with their elderly patients. Gerontologists have noted that the triad is common in geriatric medical practice. The patient's companion is usually a family member, often the family caregiver. The authors earlier found that 20% of elderly patients were accompanied to their medical visits and no younger patients were accompanied. The authors assumed that the third person may facilitate or inhibit the development and maintenance of a trusting doctor-patient relationship, the third person will probably play multiple roles during the visit, and the mere presence of the third person significantly changes the basic doctor-patient relationship.

Three majors roles suggested for the third person were advocate, passive participant and antagonist. Utilizing the Multidimensional Interaction Analysis (MDIA) system, the authors described behaviors indicative of each role type. Coalitions may be established when the third person is an advocate or antagonist. When studying triadic medical encounters, the direction of communication intent must be determined, and this is often difficult from audiotapes.

A proposed research agenda included studies of effects of the companion's presence on the content of the medical encounter, on the development of a trusting doctor-patient relationship, on patient satisfaction with the encounter, on patient compliance and on patient health status. Ethical implications of the third person's presence and concerns about obtaining a patient's permission to include the companion should be studied. Other areas for research included the companion's influence on the doctor's evaluation of the patient, a further characterization of third person roles, and the effects of the presence of more than three people during medical encounters.

Adelman, R. D., Greene, M. G. & Charon, R. (1991). Issues in physician-elderly patient interaction. *Ageing and Society*, *2*, 127-148.

This article reviewed studies examining physician-patient relationships, described unique aspects of the physician-elderly patient relationship, and presented results utilizing the MDIA communication analysis instrument. Although the heterogeneity of the older population makes it difficult to generalize, communication with elderly patients is more likely to be complicated by sensory deficits, cognitive impairment, functional limitations, and the presence of an accompanying relative or caregiver. Older patients are more likely to have multiple medical problems, making diagnosis and treatment more complex. Furthermore, many of the medical conditions encountered in geriatric patients cannot be cured. Negative attitudes of physicians toward the elderly may also affect communication.

The sociodemographic features of age, gender and race are often mismatched in the physician-elderly patient relationship. Patients' desire for control of health care varies by age, with older patients desiring less control. Female physicians spend more time with patients and are psychosocally more supportive of their patients. The setting of care also influences the medical encounter and patients' satisfaction with their care.   While patient satisfaction has been

considered an outcome of the medical encounter as well as an influence on the physician-patient relationship and patient health status, older patient satisfaction has received little attention. Compliance problems of elderly patients may be related to physician communication.

The authors reviewed the various methodologies used to analyze medical interactions, including Bales' interaction process analysis, Roter's global content analysis, Byrne and Long's tally instrument, and sociolinguistic and ethnomethodological approaches. The Multi-Dimensional Interactional Analysis (MDIA) instrument developed by the authors specifically for physician-older patient interaction was described. Utilizing the MDIA to analyze audiotapes of 88 follow-up primary care encounters in New York City and matching older (65+ years) and younger (45 years or younger) patients on gender, race-ethnicity and physician, the authors found that physicians provided better information to younger patients on physician-initiated issues and were more supportive to younger patients on patient-raised issues. Younger patients asked better questions, were better information-givers, and were more assertive with their physicians. Physicians were more condescending, abrupt and indifferent with older patients than with younger patients. The authors attributed these results to ageism on the part of physicians. The average length of the visits with older and younger patients did not differ. After the visit, patients and physicians were asked their perceptions of the main goals and primary medical problems of the encounter. There was significantly less physician-patient concordance in encounters involving older patients than in encounters involving younger patients.

Adelman, R. D., Greene, M. G., Charon, R. & Friedmann, E. (1990). Issues in the physician-geriatric patient relationship. In H. Giles, N. Coupland and J. M. Wiemann (Eds.) *Communication, health and the elderly* (pp. 126-134). London: Manchester University Press.

Noting that ageist biases exist in the medical system, the authors discussed methodologies to measure ageist language and behavior in the medical interview. Early interaction analysis systems tallied units of speech such as questions but ignored the content of talk and the quality or success of the interaction. Sociolinguists have conducted microanalyses of transcribed interviews, but their labor-intensive methods allowed few encounters to be assessed, and thus generalizability has been questioned. The authors developed the Multidimensional Interaction Analysis (MDIA) instrument to examine how information is given as well as the quality and content of that information. Analyses may be conducted directly from audiotapes. The MDIA has 36 content categories relevant to any primary care medical visit. These categories were grouped in five content areas: medical, personal habits, psychosocial, physician-patient relationship and other. Topics were coded by content area, noting who initiated the discussion. Both physicians and patients were rated on question-asking, information-giving and supportiveness. Specific behaviors such as compliments were also examined. Overall visit tone, mood, warmth and depth of discussion were assessed on global dimensions. Physicians were evaluated for egalitarianism, patient engagement and respectfulness; patients were rated on assertiveness, friendliness, relaxation, and expressiveness.

To test the hypothesis that ageism would be shown in physician behaviors, the authors matched older and younger patients on gender, race-ethnicity and physician. Patients were making follow-up visits to their doctors. No differences in physician behavior with older and

younger patients were found for social amenities, compliments, negative remarks, open-ended questions, forms of address and length of visit. Physicians were more egalitarian, patient, engaged, and respectful with younger patients. Joint decision-making was less likely to occur with older patients. With their older patients, physicians were less likely to raise psychosocial issues, provided poorer quality information, and were less likely to be supportive. Ageism may be present in the encounter, but it is exhibited in subtle ways.

Adelman, R. D., Greene, M. G., Charon, R. & Friedmann, E. (1992). The content of physician and elderly patient interaction in the medical primary care encounter. *Communication Research*, *19*, 370-380.

In order to describe the content of physician interactions with older patients, the authors performed a secondary analysis of audiotapes of 66 routine follow-up physician visits by elderly patients who were not acutely ill and were unaccompanied by a companion. The convenience sample was drawn from general medicine clinics of a major urban teaching hospital in New York City. Seventy percent of the ample were women; two-thirds were Black, and 23% were Hispanic. The average length of the medical visit was about 18 minutes.

Audiotapes were coded using the Multi-dimensional Interaction Analysis (MDIA) system. Each topic raised during the visit was coded into one of 36 topic areas, and the topic initiator (doctor or patient) was noted. The 36 topic areas were aggregated into five content areas: medical, personal habits, psychosocial, physician-patient relationship and other. Physician responsiveness to each topic was evaluated on three process dimensions: question-asking, information-giving and supportiveness. Coders assessed the quality of each process dimension on a 4-point scale. A physician responsiveness score consisted of the average of the three quality measures.

Both physicians and patients were most likely to raise medical topics for discussion. Psychosocial subjects accounted for 11.4% of physician-initiated topics and 25.7% of patient-initiated topics. There was little discussion of patients' personal habits. Physicians initiated almost two-thirds of all topics raised during the visit. About 70% of medical topics and personal habits topics were initiated by physicians, whereas 55% of psychosocial topics were initiated by patients. Patients were also more likely than physicians to initiate discussion of the physician-patient relationship. For every content area, physicians responded better when they had initiated the topic, a finding which suggests that older patients may experience difficulty getting their concerns addressed by physicians.

Anderson, L., Rakowski, W. & Hickey, T. (1988). Satisfaction with clinical encounters among residents and geriatric patients. *Journal of Medical Education*, *63*, 447-455.

In order to examine factors explaining residents' satisfaction or dissatisfaction regarding clinical encounters and to determine whether a resident's satisfaction with a patient was similar to the patient's satisfaction with the resident, 69 patient-resident pairs completed questionnaires. All patients were aged 60 and over, averaging 69.5 years. Patients were predominantly white (86%) women (74%), and 50% were married. The average educational level (13.3 years) was high, and 42% indicated their occupation was professional. The 15 internal medicine residents (12 males) completed the self-administered questionnaire after the patient had returned his or her form by mail.

The dependent variable, satisfaction was measured by 5 items answered on 5-point response scales. Satisfaction with the amount of time spent in discussion, time spent on explanation and content of the communication was assessed. Patient education and number of prior contacts between patient and resident were control variables. Independent variables included attitude toward the patient (Aging Semantic Differential Scale), patient's health status (lifegraph, comparison with same-age peers), patient adjustment to medical care (understanding of physician instructions, adjustment in daily activities, extent of patient-resident joint control over patient's future health) and expected benefits of health education activities.

Both medical residents (mean=4.2) and patients (mean=4.6) expressed satisfaction with their clinical encounters; residents expressed positive attitudes (mean=4.9) toward older patients. Bivariate correlations indicated that greater resident satisfaction was associated with positive attitudes toward the patient, positive assessments of the patient's health status, positive expectations of benefits of health education, and higher patient educational level. Regression analysis revealed that only expected benefits of health education and attitudes toward the patient were significant predictors of resident satisfaction. It is noteworthy that residents felt older patients could benefit from health education. Patients' satisfaction ratings across the 15 residents were similar. However, there was little similarity in paired patient and resident satisfaction ratings. Overall, patients expressed higher satisfaction than residents.

Anderson, L. A. & Zimmerman, M. A. (1992). Patient and physician perceptions of their relationship and patient satisfaction: A study of chronic disease management. *Patient Education and Counseling*, in press.

To document physicians' and patients' perceptions of their relationship and the impact of these perceptions on patient satisfaction, the authors tape-recorded 134 physician-patient interactions at 2 Veterans Administration Medical Centers. Patients were male diabetics making return visits to their physicians. They averaged 64.3 years of age, were predominantly(79%) white; 45% had less than 11 years of formal schooling, and 66% were currently married. After each clinic visit, physicians (n=12; mean age 30.8 years) completed individual patient questionnaires assessing the patient's functional status and diabetes metabolic control status. Physicians were also asked to characterize their relationship with each patient as physician controlled, a joint partnership or patient-controlled. Each patient participated in a telephone interview within 3 days of the clinic visit. Interview data included demographic and treatment information, the patient's assessment of the relationship, and the patient's satisfaction with care. Patient satisfaction was measured by a 9-item scale developed by McCaul, Glasgow & Schafer consisting of 6-point Likert rating scales. Satisfaction scored ranged from 3.0 to 6.0 (very

satisfied) with a mean of 5.5. Since few patients or physicians characterized their relationship as patient controlled, this category was combined with the partnership category. Patients characterized 74% of encounters as partnerships compared with 67% of physicians. Interactions lasted an average of 21.37 minutes.

Preliminary regression analysis indicated that the individual encounter rather than the physician's clinic was the appropriate unit of analysis. Patient education was the only variable significantly related to patient satisfaction. Stepwise regression procedures showed that patients with lower education and physicians' perceptions that the relationship was a partnership were related to higher patient satisfaction. Physician-patient agreement regarding control in the interaction was no better than expected by chance. Physicians who characterized the relationship as a partnership spent more time with the patient and had been in practice longer than physicians who characterized the relationship as physician-controlled. However, neither length of encounter nor physician years in practice were related to patient satisfaction. Physicians who agreed with their patients had been in practice longer and their patients had the highest levels of education, supporting the belief that when status differences are narrower, the relationship is viewed more congruently.

Arntson, P., Makoul, G., Pendleton, D. & Schofield, T. (1989). Patients' perceptions of medical encounters in Great Britain: Variations with health loci of control and sociodemographic factors. *Health Communication*, *2*, 75-95.

To determine how patients' perceptions of their medical encounters varied by their health loci of control and sociodemographic characteristics, 3,128 patients of 68 male general practitioners in Great Britain completed post-appointment questionnaires. The survey asked about the doctor's performance of seven consultation tasks, contained a Multidimensional Health Locus of Control Scale modified from that of Wallston, and solicited sociodemographic information. The MHLC scale contained three dimensions: internal HLC, fate HLC and doctor HLC.

Analysis was limited to surveys completed by 2,245 16 to 85-year-old patients who indicated their sex (63% female). Sixty-eight percent of patients were married and 57% were working. Due to the large sample size, only comparisons associated with p<.005 were considered significant. There were no marked age or social class differences between patients who perceived high or low internal HLC. Significantly more females than males rated their internal HLC as low. Patients who rated themselves high on doctor HLC or fate HLC were significantly older and from a lower social class. Marital status showed no relationship to HLC. Patients with high doctor HLC or fate HLC felt their physicians did not respond well during the encounter. Patients with high internal HLC, doctor HLC or fate HLC reported that their physicians encouraged significantly more patient involvement than those low on these dimensions.   Patients with high internal HLC saw their doctors less than those low on the dimension, whereas patients high on doctor HLC saw their physicians more than those scoring low on this dimension.

Females reported that their doctors gave them more responsibility and that they were less concerned following the consultation. Single patients, more than married ones, agreed that the doctor did not explain everything to them. Those of low social class felt the doctor did not discuss the cause of their problem or treat them as equals. Patients who were retired or laid-off

were most concerned both before and after the consultation. Patients' level of concern appeared to decrease as more information was shared by the doctor but increase as more responsibility was shared. This increased concern may be related to perceived external control; patients reporting an increase in concern also scored higher on doctor HLC or fate HLC than those reporting no change or decreased concern.

Female patients visited their doctors more than males. Single patients visited doctors less than their married or widowed counterparts. Patients high or low in social class perceived significantly more familiarity with their doctors than middle-class patients. The retired/laid off group reported the most familiarity with their doctors, a pattern that is probably related to age. There was an interaction between age and gender: compared to men under 65, women under 65 reported higher familiarity with their doctor; after age 65, men perceived higher familiarity.

Beisecker, A. E. (1988). Aging and the desire for information and input in medical decisions: Patient consumerism in medical encounters. *The Gerontologist*, *28*, 330-335.

This study reported the attitudes and interaction behaviors of 106 patients aged 17-85 seen in the rehabilitation medicine outpatient clinics of a large midwestern teaching hospital. Data consisted of patient demographic and attitude measures plus tape-recordings of doctor-patient interactions. The attitude survey contained parallel scales assessing patients' desires for medical information and their attitudes regarding who should make medical decisions (doctors, patients or both) in a variety of content areas. Tape recordings were coded for patient consumerist communication behaviors: information-seeking, assertive comments, and suggestions to physicians.

Nearly all patients felt it was very important to have information in all content areas. However, even though they desired information, patients aged 60 years or older gave more decision-making authority to physicians than did younger patients. Younger patients, although giving the doctor more authority than the patient, were far more likely to favor joint decisions.

Patients under age 25 or over age 60 more often brought companions with them who questioned physicians on their behalf than did patients aged 25 to 59 years. There were no statistically significant age differences in patient consumeristic communication behaviors, but age was negatively correlated with attitudes challenging physician authority.

Beisecker, A. E. (1989). The influence of a companion on the doctor-elderly patient interaction. *Health Communication*, *1*, 55-70.

This study was a secondary analysis examining audiotapes of medical encounters of physicians with 21 rehabilitation medicine patients aged 60 to 85 years, twelve of whom brought companions who interacted with physicians. For interactions involving companions, each "turn" (one speaker without interruption) was coded for speaker and recipient of the comment and for

segment of the encounter: history-taking, physical examination and feedback. Recordings were qualitatively analyzed to determine the roles played by patients' companions.

Patient gender or education did not influence whether or not they brought a companion. All companions were family members (spouses or adult children). Within the age group over 60 years, the older the patient, the more likely he or she would be accompanied by a companion. There was no significant difference in length of interaction for patients with and without companions indicating that companions, by speaking, took time away from patients.

Doctor-patient communication, measured by turn-taking, was balanced. However, patients initiated more comments during the history-taking and physicians initiated more during the feedback segment. Doctor-companion communication was not balanced; doctors directed fewer comments to companions than companions did to doctors, indicating companions responded or initiated comments when doctors were not addressing them. Companions were active primarily during the history-taking and physician feedback portions of the encounter and were relatively inactive during the physical examination. Companions played three roles: watchdog, verifying information for both patient and physician; significant other, providing feedback regarding role behavior to both patient and physician; and surrogate patient, answering questions directed to the patient.

Beisecker, A. E. (1990). Patient power in doctor-patient communication: What do we know? *Health Communication*, *2*, 105-122.

This article reviewed the literature on power in relationships between doctors and patients with particular attention to the active patient role and possible doctor-patient conflict when the two parties have differing expectations of the patient's or physician's role. The author discussed the effects of sociodemographic variables, attitudes, and situational factors on patients' attempts to influence medical encounters. Sociodemographic factors which affect doctor-patient communication include income, education, cultural background, and age of patients and gender of both physician and patient. Younger, better educated patients and those with higher incomes ask more questions of physicians. Younger, better educated patients are more likely to have consumerist attitudes; however, especially for older patients, it may take a longer medical encounter (over 18 minutes) for these attitudes to be exhibited in consumerist communication behavior such as question-asking. A patient's behavior when interacting with a doctor may vary depending on the situation the patient encounters at the time of the encounter. Important situational factors include type of illness, reason for visit, location of encounter (home, hospital, office), length of interaction, presence of a companion and whether the visit is a first or follow-up encounter. Physician behaviors also influence patient communication behaviors.

The review also cited studies focusing on interaction content including variables affecting, and affected by, physician-patient information exchange, patient assertiveness, and patient input in medical decisions. Patients desire information but make few attempts to elicit it from doctors, although they can be trained to do so. Even if they feel they have a right to challenge a doctor's authority, few patients do so. Patients vary, also, in their attempt to verbalize their expectations to physicians. Some patients desire to participate in medical decisions; others do not. Older, sicker men are least likely to desire participation in medical decision-making.

Beisecker, A. E. & Beisecker, T. D. (1990). Patient information-seeking behaviors when communicating with doctors. *Medical Care*, *28*, 19-28.

To better understand patient differences in information- seeking behaviors, encounters between physicians and 106 rehabilitation medicine patients were studied. Data included sociodemographic and attitude surveys (Beisecker Desire for Information Scale and Beisecker Locus of Authority Scale), tape- recordings of medical encounters, and a tape recorded post-appointment interview. The two attitude scales contained parallel items. Tape recordings were analyzed by counting the number of information-seeking comments made by patients.

Results indicated that, while patients wanted information in a wide range of medical areas, they did not feel they ought to assume decision-making responsibility in those same areas. Patients averaged 3.4 information-seeking comments per medical encounter. Hierarchical regression analyses indicated that the number of patient information-seeking behaviors was more directly associated with situational variables (length of interaction, diagnosis, reason for visit) than with patients' attitudes or sociodemographic characteristics. Age was positively associated with the number of patients' information-seeking comments for patients with longer interactions (>18 minutes) but not for those whose physician encounters were shorter. Attitudes influenced information-seeking behaviors only for patients with longer interactions.

Bertakis, K. D., Roter, D. & Putnam, S. M. (1991). The relationship of physician medical interview style to patient satisfaction. *Journal of Family Practice*, *32*, 175-181.

The authors studied audiotapes from 550 return visits to 127 physicians at 11 sites across the U.S. Patients were predominantly female (58%), white (55%) and poor and were adults with chronic diseases who were known to their doctors. Patient age ranged from 21 to 94 years with a mean of 60 years. Audiotapes were coded using the Roter Interaction Analysis System. Coders also made a global assessment of the emotional tone of the visits. Both patients and physicians completed background questionnaires, and patients responded to 43 items related to aspects of satisfaction and one global satisfaction measure.

Factor analysis revealed 5 satisfaction subscales: task-directed skill, interpersonal skill, attentiveness, emotional support and partnership. Task-directed satisfaction was the most important factor related to patients' overall satisfaction. This factor showed the weakest association with sociodemographic variables. Of the communication categories, only communication regarding psychosocial topics was consistently related to satisfaction. Physician question-asking about biomedical topics and patient talk about biomedical topics were negatively related to satisfaction. Older white patients had the greatest satisfaction. Women were more satisfied than men only on the emotional support dimension. Physicians initiated more communication than patients, and the more the physician dominated the talk, the less satisfied the patient was.

Blanchard, C. G., Labrecque, M. S., Ruckdeschel, J. C. & Blanchard, E. B. (1988). Information and decision-making preferences of hospitalized adult cancer patients. *Social Science & Medicine*, *27*, 1139-1145.

To determine medical and demographic characteristics of patients preferring to participate in their care versus those who prefer a more authoritarian doctor-patient relationship, the authors observed 439 interactions of hospitalized adult cancer patients and medical oncologists during morning rounds. After morning rounds, the observer questioned each patient regarding preferences for information and input in decision-making, perceptions of physician behaviors, and satisfaction with the medical encounter. A single patient was included in the study no more than three times per week.

The Physician Behavior Check List (PBCL) was used to measure occurrence/ nonoccurrence of 34 behaviors. The observer completed two visual analogue scales measuring the extent to which the physician addressed the patient's needs and the patient's involvement in the interaction. 92% of patients preferred to receive all information, good and bad; 69% preferred to participate in medical decision-making. Of those who wanted information, 24.9% preferred to let doctors make medical decisions. The mean age of those who wanted all information was 55 years. Age was significantly related to preference for participation in decision-making, with younger age associated with desire to participate. For those who wished to participate in decision-making, the sex ratio was equal; for those who did not, males outnumbered females two to one. Older, sicker males, almost all of whom were married, especially preferred to leave decisions to doctors. Those preferring to participate in decisions were significantly more likely to have a prognosis of less than 3 months or greater than one year. Patients perceived the physician spent at least 50% more time with them than the observer recorded. Physician behaviors that were found significantly more frequently in the patient group who desired decision-making input were: used first name in addressing patient, attempted to establish privacy for physical examination, examined patient's chest or abdomen, and discussed test results with patient.

Patients desiring input in decision-making more often perceived that the physician discussed future tests or treatments, discussed test or treatment results, gave good news, discussed discharge, discussed side effects and performed a physical examination. Patients preferring to leave decisions to physicians more often perceived that the doctor discussed the family's role in patient care. Comparison of patient perceptions with researcher observations indicated there were no differences in the accuracy of perceptions between patients who did and did not want to make decisions. Patients preferring to participate in decision-making perceived themselves as more involved in the interaction and were less satisfied.

Blanchard, C. G., Labrecque, M. S., Ruckdeschel, J. C. & Blanchard, E. B. (1990). Physician behaviors, patient perceptions, and patient characteristics as predictors of satisfaction of hospitalized adult cancer patients. *Cancer*, *65*, 186-192.

In order to test the hypothesis that patient perceptions of physician behaviors would be related to patient satisfaction, 1423 interactions of medical oncologists with hospitalized adult cancer patients on morning rounds were observed. Since each patient may have been observed in multiple interactions with one or more physicians, mean scores for each set of interactions

between a specific patient and a specific physician were used, thereby yielding 366 cases for analysis. Physician behaviors were assessed by the Physician Behavior Check List (PBCL) on which the observer noted occurrence/nonoccurrence of 34 behaviors. The observer also noted the length of the encounter and completed two 100mm visual analogue scales noting the extent to which the physician addressed the patient's needs and the patient's involvement in the interaction. After completion of rounds, the observer returned to each patient's room to ask questions regarding patient perceptions of physician behavior (whether each of 17 behaviors had occurred) and patient satisfaction with the day's visit (Patient Satisfaction Questionnaire-PSQ). Patients also completed three visual analogue scales (the two completed by the observer plus an additional scale measuring satisfaction) and estimated the amount of time the physician had spent with them.

Patients averaged 56.7 years in age, and 52.5% were female. Physicians spent an average of 4.4 minutes in the patient's room; patient estimates of time spent was 8.8 minutes. On the analogue scale measuring the extent to which physicians addressed the patient's need, observers' mean rating was 75.4 whereas patients' mean rating was 86.9. The observers' ratings of patient involvement averaged 64.1 as compared with patients' mean rating of 73.8. The mean patient satisfaction rating was 87.8.

Physician behaviors were variable; only five occurred in more than 60% of cases. The most frequently occurring physician behavior was "inquires about patient's over all state." Path analysis revealed that four variables (patient perception of needs addressed, perception of emotional support provided by physician, older patient age, and physician discussed treatment) explained 62% of the variance in patient satisfaction. Patient perceptions explained a greater percentage of the variance in patient satisfaction than did observed physician behaviors. Patient perceptions of several physician behaviors involving information were related to their perceptions of emotional support or needs addressed. Neither measure of time spent was predictive of satisfaction.

Breemhaar, B., Visser, A. & Kleijnen, J. (1990). Perceptions and behaviour among elderly hospital patients: Description and explanation of age differences in satisfaction, knowledge, emotions and behaviour. *Social Science & Medicine*, *31*, 1377-1384.

This paper describes the results of a secondary analysis of pooled data from eleven investigations studying the relationship of patient age to experiences and behavior during hospital stays in the Netherlands. Data came mostly from face-to-face interviews during hospitalization, although there were some questionnaires, mailed surveys and home interviews. Patients rated their satisfaction with care, nursing, medical treatment, emotional support, information supply, admission procedure, opportunities for recreation and opportunities to be personally active. The mean of the separate satisfaction measures constituted a patient's general satisfaction score. The patient's level of knowledge, emotional state (Spielberger's State-Trait Anxiety Inventory), emotional problems and hospital behavior (asking for information, discussing emotional problems, self-care), social desirability responses (Crown and Marlowe), and locus of control (Rotter) were measured. Patients were also asked about feelings of gratitude and fear of expressing complaints.

Patient education was measured by determining patients' perceptions of how much information they had received about their illness and treatment, the clarity of this information, information about regulations and facilities received upon admission, and whether patients had received and read a hospital information booklet.

Correlations revealed that older patients were more satisfied, knew less about medical subjects, regulations and facilities, and were less active on all three behavioral variables. Scheffe's test for multiple comparisons revealed that patients aged 61-80 had significantly fewer problems, asked fewer questions, and discussed their problems less than patients aged 20-50. They were significantly more satisfied than patients under age 30. Patients aged 81 and over did not differ from other age groups, but there were few of them. Patients aged 71 and over had significantly less knowledge than younger groups and performed less self-care than patients aged 31-50.

Older patients tended to be female, married, religious, with lower education and lower income and more previous hospitalizations. Partial correlation analyses controlling for age differences in gender, education, income, marital status, church membership and previous hospitalizations revealed essentially the same relationships with the exception of two satisfaction measures (opportunities for recreation and activity). Elderly patients more often supplied socially desirable responses, showed more gratitude, were more fearful of expressing complaints, and showed an external locus of control, both general and health-specific. They judged medical information supplied as clearer and more adequate, indicated they had received more information on admission, but had less frequently received and read the information booklet. Controlling for demographic variables and hospital experience, the relationships of age with social desirability, gratitude and fear of complaining remained significant; the relationships of age with locus of control measures, information received on admission, and the information booklet were weakened.

Regression analyses showed that age was a moderate predictor of perceptions of hospitalized patients. Satisfaction was best predicted by patients' opinions about medical information received, gratitude, age and locus of control. Emotional problems were best predicted by opinions of medical information, fear of complaining, gratitude and age. Patients' knowledge of medical subjects and hospital issues was best predicted by gratitude, age, social desirability and externality. Both asking questions and discussing problems were best predicted by age. Other predictors of question-asking were gratitude and external health locus of control. Discussing problems was also predicted by assessment of medical information, fear of complaining, and external locus of control.

Clair J. M. (1990). Regressive intervention: The discourse of medicine during terminal encounters. *Advances in Medical Sociology*, *1*, 57-97.

Relying on data generated from field observations, recorded conversations, and interviews with physicians and adult oncology patients, the author takes a qualitative approach to explain doctor-patient-family communication patterns. He followed 138 patients and families including 21 who participated in discourse analysis. Patients are socialized to the normative order and social structure of the oncology ward. Physicians disengage once a patient is considered terminal. When data did not show physician withdrawal, the death was considered uncertain. Disengagement may be in the form of silence, charting behavior during bedside medical interviews, or the exchange of

pleasantries with others in the room, thereby utilizing family members to manage topics and conversation. Doctors tend to communicate negative information to families instead of the patient, enlisting families to help them withdraw from active curative intervention. Clair used case study field notes and transcripts to illustrate his findings.

Coe, R. M. (1987). Communication and medical care outcomes: Analysis of conversations between doctors and elderly patients. In R. A. Ward and S. S. Tobin (Eds.), *Health in Aging (pp. 180-193)*, New York: Springer.

This chapter reviewed approaches to the study of doctor-patient communication and procedures for analyzing process and meaning in the exchanges. Prior research indicated that positive outcomes are associated with particular communication styles, especially those which reduce doctor-patient status differences and incorporate the patient's viewpoint.

In analyzing communication with elderly patients, one must consider the possibility of cohort effects (older patients tend not to challenge physician authority), age effects (decline in hearing, vision, memory, psychomotor reflexes), and unmet expectations (chronic diseases cannot be cured).

Two physician encounters were tape recorded for each of seven elderly patients, one with patient and physician and the other with physician, patient, and an accompanying relative. The tape recordings allowed Coe to identify educational strategies used by physicians to promote compliance with medication regimens. Physicians engaged the relative as medication supervisor, adapted their language to the perceived level of understanding of the patient and relative, used medication reminders or aids, and seemed sensitive to the patient's input in adapting the medication schedule to the patient's activities.

The addition of the third person meant that much of the doctor's conversation was directed toward the relative rather than the patient. The relative acted as interpreter to elaborate the patient's complaint or explain how the physician's orders could be carried out at home. Relatives also acted as negotiators with physicians. Family members were encouraged by physicians to become caretakers of the patient. In any given encounter, more that one coalition formed, and these coalitions changed throughout the visit. Coalitions varied in duration, and some did not achieve their goals. Data was not available to assess medical outcomes.

Fox S.A., Murata P. J. & Stein J. A. (1991). The impact of physician compliance on screening mammography for older women. *Archives of Internal Medicine*, *151*, 50-56.

This study investigated the factors most related to past mammography use and factors most predictive of intentions regarding future mammography examinations for the 517 women over age 50 who participated in the 1988 Breast Cancer Screening Consortium Survey conducted in Los Angeles County. The mean age of the women over 50 years was 64 years, Those over 65 were significantly more likely to be white, poorer, less likely to have an educational level of more than 4 years of college, and more likely to be single (widowed, divorced, separated or never married). Women over age 50 were widely aware of mammography. Fewer younger women (50-64 years) than older (65 and over) thought that mammography had no disadvantage, suggesting that older women were more accepting. Younger women were less likely to have never had a mammogram and more likely to have had a mammogram in the last year. Younger women were more likely than older women to report they would get a mammogram through self-referral or through a public low-cost facility. Women who used prepaid healthcare programs were more likely to have had a mammogram than those who used a physician's office. Women with no regular source of healthcare were least likely to have had a mammogram. Logistic regression analyses revealed that, for younger women, the variables significantly associated with having had a mammogram within the past year were the physician talking about mammography, household income, correct knowledge of mammogram cost and intention to get a mammogram in the next year. For women 65 and over, the physician talking to the woman about mammography, knowing the correct cost, intending to get a mammogram in the next year, knowing that increasing age is a risk factor for breast cancer, and the physician talking about early detection were significantly related to having had a mammogram in the previous year. Physician discussion with both younger and older women varied widely, but most frequently included reasons why a woman should have a mammogram. Physicians tended to be more directive with older women, telling them to have a mammogram without providing reasons. Lack of knowledge, lack of access and financial resources did not explain the relatively low level of mammogram utilization. Since physicians have considerable influence on their women patients, physician compliance with preventive guidelines, by discussing mammography with their older patients, is an important factor in getting them to referral.

Fox S. A. & Stein J. A. (1991). The effect of physician-patient communication on mammography utilization by different ethnic groups. *Medical Care*, *29*, 1065-1082.

Utilizing telephone interview data from the 1988 Breast Cancer Screening Consortium survey conducted in Los Angeles County, CA, the authors studied 963 women over age 35 who were white (n=586), black (n=227) or Hispanic (n=150). Hispanics were further defined as Hispanic and white, Hispanic and black, and Hispanic. The outcome variable, mammography utilization, was measured as the number of mammograms a woman had ever had and whether she had received one in the past year. Barriers to utilization were assessed as was the effect of physician-patient communication. Communication factors included 1) asking the doctor for a mammogram, physician discussion of 2) early detection, 3) breast self-examination, 4) breast physical examination, and 5) mammography and 6) whether the woman had had a clinical breast examination in the previous year. The average age of white women was 56 years compared with 48 years for blacks and Hispanics. Hispanic women were significantly more likely than black or white women to have never had a mammogram, and Hispanic women under age 50 were less likely to have had a mammogram in the last year. There were no significant racial differences in mammograms received in the last year by older women. White women were most likely to use physicians in their private offices whereas Hispanic women were more likely than the others to have no regular source of health care. White women, regardless of their source of health care, were more likely to have had a mammogram. Cost was perceived as a barrier for all groups; black and Hispanic women were more likely than whites to be concerned about effects of radiation; and Hispanic women strongly perceived that the fear of cancer would cause them to hesitate. Black women were most accepting of getting a mammogram without physician referral; Hispanic women were most likely to say they'd use low cost public facilities to get mammograms. Situational factors influenced intentions to obtain mammograms more than did ethnicity. Over 80% of all women, regardless of ethnicity, said they'd be most likely to obtain a mammogram if their doctor recommended one. Physicians mentioned breast self-examination and clinical breast examination more often than mammography. White women were twice as likely as Hispanic women to recall physician mention of mammography. All ethnic groups listed the doctor as their most believable source of health information. Logistic regression analyses determined that the variable, "Did your doctor tell you anything about mammography?" was the most powerful predictor of all three races having had a mammogram ever and in the last year. Reasons for mammography provided by physicians included a patient's age, it is part of routine check-up, ability to detect abnormalities, and it is a precaution. Hispanic women were less likely than whites or blacks to have reasons provided by the doctor. Physicians used a directive approach more with whites than either blacks or Hispanics. The failure of physicians, especially those in private practice, to communicate information about mammography to Hispanic women may be due to the smaller percentage of Hispanic women having CBE, the lower tendency of Hispanic women to cite doctors as the most believable source of health information, the greater tendency of Hispanics to cite barriers to and anxieties about mammography, and language differences.

Glasser, M., Prohaska, T. & Roska, J. (1992). The role of the family in medical care-seeking decisions of older adults. *Family & Community Health*, *15*, 59-70.

This study was designed to determine which older adults are likely to have another person accompany them to a medical visit, the role of the other person in the decision to seek medical care, and the association between the companion's activities during the medical encounter and satisfaction with that encounter. The authors found that 37% of geriatric clinic patients were accompanied to the physician visit. They interviewed 50 companions of patients visiting a geriatric medical clinic at the initial visit to the office or a non-follow-up care visit (initial visit for presenting problem), one week later and three months subsequent to the initial visit. The first two interviews were face-to-face; the last was via telephone. The initial interview focused on demographics, symptoms and circumstances leading to the visit; the second interview asked the companion about attitudes, impressions, expectations for the medical visit, and the decision-making process. During the three-month interview, companions were asked about the patient's medical care utilization since the visit and the companions' views of whether expectations for the visit had been met.

Patients were mainly females (72%), widowed (62%) aged 76 to 90 years (70%) with less than a high school education (56%) receiving less than $15,000 per year (63%). Roughly half (52%) rated their health status as very good or good. Most companions were female (80%) and younger than the patient (72% under age 70). Companions had more formal education and higher incomes than patients. Every companion was a family member of the older patient; half were daughters and 50% were spouses of the patient.

Most visits (72%) were for new symptoms or problems, although the symptom had been present longer than one month in 25% of cases. Companions reported that patients solely made the decision to seek care 26% of the time, while the decision was solely the companion's 24% of the time. There were no significant correlations between the source of the decision to seek care or who actually made the appointment and the length of time between noticing the problem and making the doctor's appointment. Only about 25% of older patients actually made the appointment with the doctor.

Older patients themselves frequently identified a problem or know something was wrong with them (44%) and 80% of the time they were included in making the decision to seek medical care. Those not involved in the decision were in poorer health or had Alzheimer's Disease. Family members primarily made the care=seeking decision in 38% of the cases whereas patients were the primary decision makers in 26% of cases. Family members mentioned their desire to provide support (28%), the fact that the patient lived with them (22%) and their responsibility for the patient (14%) as the major reasons for being involved in the care-seeking decision. The greater the companion's ongoing responsibility for the patient, the more likely the older patient was involved in the care-seeking decision (P=.04). In 40% of cases, someone other that the companion and patient was consulted about the visit to the doctor. The family was more likely to consult an outside person for advice if the patient was not included in the office visit decision.

Chi square analyses differentiating spouse companions from other relatives showed that spouses were more likely to accompany younger patients; spouses more often accompanied men, and patient health was rated higher for those accompanied by their spouses. Older female spouses were caring for their husbands whereas younger women tended to care for their mothers and mothers-in-law. The majority of patients accompanied by spouses were involved in the care-seeking decision and over half of these patients made the appointment. Patients accompanied by

other family members were not as likely to be involved in the decision or to make the appointment. At the 3-month interview, most companions were satisfied with the care received (67.3%) and with interactions with the doctor (73.5%). Twenty percent, however felt something should have been done differently.

This study showed that caregiving roles and caregiver input begin prior to the encounter with the physician.

Glasser, M., Rubin, S. & Dickover, M. (1989, July/August). Caregiver views of help from the physician. *The American Journal of Alzheimer's Care and Related Disorders & Research*, 4-11.

To obtain dementia caregivers' perceptions of their contact with physicians, a survey questionnaire was distributed to 66 caregivers with 26 completed questionnaires returned. Dementia patients ranged from 59 to 89 years of age; their caregivers ranged in age from 30 to 87 years. All respondents and patients were white. Behaviors for which caregivers would most often seek physician help included violence, toileting, forgetfulness, sleep and falling. On each activity, more caregivers indicated they would seek help than indicated they actually did seek help from a physician. Caregivers reported most often desiring help handling a crisis, homecare referral, explanation of the diagnosis, explanation of the future, and referral to another doctor. Issues most often discussed with the doctor were explanation of the future, help in handling a crisis, explanation of the diagnosis and explanation of medications.

Most caregivers were pleased with the assistance given for both specific problems and general issues. Physician involvement in care management tended to be "some" or "periodic." Eighty percent of caregivers felt this support was enough. Satisfaction with information given and solutions to problems averaged 3.1 and 3.0 on a 5-point scale. Over 50% were dissatisfied or very dissatisfied with support offered and 40% were dissatisfied with assistance in referrals. Patient age was negatively associated with caregiver satisfaction. There was a lack of association between caregiver satisfaction and physician involvement, physician support, and whether the caregiver had noted specific areas where the physician was most or least helpful. Caregivers wanted doctors to better explain the disease and to assist the caregiver to cope, making clear what the caregiver could expect to happen. A major complaint was that physicians did not refer caregivers to social services.

Glasser M., Rubin S. and Dickover, M. (1990). The caregiver role: Review of family caregiver-physician relations and dementing disorders. In S. M. Stahl (Ed.), *The Legacy of Longevity-Health and Healthcare in Later Life* (pp. 321-337). London: Sage.

This paper reviewed literature on the physician-elderly patient-caregiver relationship with special attention to patients with dementia. The authors discussed possible roles of the third person (family caregiver) in doctor-elderly patient relationships, noting that uncertainty may be the key variable affecting a caregiver's situation. Caregivers of dementia patients experience burdens and negative feelings, and many seek the assistance of physicians to alleviate these burdens. Attention and concern by a physician is a critical factor in a caregiver's continued well-

being and ability to provide assistance to the patient. When a patient is demented, rules applicable to other health care encounters may need to be changed. Physicians may need to address family issues, even if they feel uncomfortable doing so. Physicians need to be available to family members throughout the course of the patient's illness. Caregivers, while not necessarily expecting doctors to provide for the caregiver's health needs, want and expect doctors to acknowledge the difficulties associated with the caregiving role. In later stages of the disease, there is a return to the health care dyad--this time composed of physician and family caregiver instead of physician and patient. However, healthcare relationships become increasingly complex rather than reverting to the simpler dyad; there may be multiple healthcare providers such as a home health nurse, day-care staff, and nursing home personnel in addition to the physician and family caregiver. Improved patient management and caregiver support requires caregiver education, physician education, increased understanding of how a family member decides to access the physician, attention to the economics of health care, and continued research on the complexities of the doctor-patient-family caregiver relationship.

Greene, M., Adelman, R., Charon, R. & Friedmann, E. (1989). Concordance between physicians and their older and younger patients in the primary care medical encounter. *The Gerontologist*, *29*, 808-813.

Using coded audiotapes of medical encounters, patient postvisit interviews and physician questionnaires, the authors tested the hypothesis that less concordance exists between older patients and their doctors than between younger patients and their doctors. Thirty older (65+) patients making a follow-up visit to the outpatient clinic of a New York City teaching hospital were matched for physician, gender and ethnicity with 30 younger (45 years or less) patients. The sample was 79.5% female, 64% black and 30% Hispanic.

Audiotapes were coded using the Multi-Dimensional Interaction Analysis (MDIA) system developed by the authors. Coders identified the content of all subjects discussed, who initiated each discussion, and the major visit topics for both patient and physician. The quality of physician and patient questioning, information giving and supportiveness on specific topics was assessed. Coders also assessed global physician behaviors (egalitarianism, respectfulness, patience and involvement) and global patient behaviors (assertiveness, friendliness, tension, expressiveness).

Patients were interviewed about their goals for the visit and the primary problems that were addressed. Physician responded similarly using a self-administered questionnaire. From these responses, an agreement index was developed and percentage of concordance was determined. The level of concordance about the main goals for the visit was low for both older (25%) and younger (37%) patients. Agreement regarding the primary medical problems that had been dealt with was less than 50% for both age groups. When coders compared patients' and physicians' major topics as determined by the audiotapes, levels of patient-physician concordance were low. Significantly less concordance occurred in older patient visits (25%) than in younger patient visits (46.7%). For medical topics, concordance was 54% for younger patients compared with only 28% for older patients. For personal habits and psychosocial topics, there were no statistically significant differences in concordance for the two age groups. The differences can't be based on the length of the encounters since encounters for both groups averaged 17 minutes in length. The authors conclude that older patients and their physicians may be at higher risk for

misunderstandings. Physicians were less involved with older patients and less likely to share decision-making. Younger patients were better at giving information and more assertive. Physicians raised more medical topics during visits with older patients; thereby making it more difficult to achieve concordance regarding which were the major medical topics discussed. Only one of 12 physicians was over 45 years old, and thus physicians may have found it easier to identify with their younger patients.

Greene M. G., Adelman R. D., Friedmann E., & Charon R. (1994). Older patient satisfaction with communication during an initial medical encounter. *Social Science & Medicine*, 38, 1279-88.

The purpose of the study was to examine the interactional correlates of older patient satisfaction with an initial visit with a general internist. Audiotapes of 81 initial visits between patients and physicians were coded using the Multi-dimensional Interaction Analysis system. The patients and physicians also completed post-visit satisfaction questionnaires. Data was collected at a hospital-based general medicine group practice in an urban city. The patients who were 60+ years old, also had multiple chronic conditions which is typical in this type of setting. Of the 18 physicians that participated, 9 were male and 9 were female.

Older patient satisfaction was positively correlated with the following variables: physician questioning and supportiveness on patient-raised topics; patient information-giving on patient-raised topics; the length of the visit; the physician's use of questions worded in the negative; shared laughter between the physician and the patient; and, physician satisfaction. The findings suggest that older patients prefer encounters in which: (1) there is physician supportiveness and shared laughter; (2) they are questioned about and given an opportunity to provide information on their own agenda items; and (3) physicians provide some structure for the first meeting through their use of questions worded in the negative (e.g. "No chest pains, no shortness of breath, no trouble breathing?"). The authors caution that although this particular sample appears to be satisfied with what is considered a traditional model of the physician-patient relationship, patients in other settings and in future samples may prefer other communication approaches. Also, they suggest that aspects of communication which provide satisfaction to patients in the first visits may be different than aspects of communication associated with patient satisfaction in follow-up visits.

Greene, M. G., Hoffman, S., Charon, R. & Adelman, R. (1987). Psychosocial concerns in the medical encounter: A comparison of the interactions of doctors with their old and young patients. *The Gerontologist*, 27, 164-168.

Five physicians practicing in the general outpatient area of an urban teaching hospital in New York City were audiotaped during follow-up visits with 8 patients each, four younger (45 years or less) and 4 older (65+ years) matched for sex and race-ethnicity. Seventy percent of the sample was female, 55% were black, and 55% received Medicaid. The Geriatric Interaction Analysis (GIA) system, developed by the authors, was used to analyze tape recordings on three

axes: information-giving, questioning and supportiveness, rating each area on a 4-point scale. Topics of discussion were classified as patient-raised or physician-raised and were grouped in four content areas: medical, personal habits, psychosocial and other.

Of the content areas, doctors were most likely to raise medical issues with both older and younger patients, and both groups of patients were most likely to bring up medical topics for discussion. Doctors were much more likely to raise psychosocial issues with younger patients than with older patients, and younger patients were more likely to raise psychosocial issues than were older patients. Although there were no statistically significant differences in GIA ratings for physician response to young and old patients for physician-initiated topics, doctors responded significantly better on patient-raised psychosocial topics when these issues were raised by younger patients. In discussing results, the authors indicated that older patients may perceive the purpose of the medical encounter in a traditional way and, therefore, not raise psychosocial topics; younger patients may raise more psychosocial topics with doctors because doctors raise similar topics with them; or perhaps older patients do not have as many psychosocial concerns as previously thought. Since the physicians were young, there may have been a more egalitarian sharing of interests with their younger patients. Since doctors tended to be less responsive when older patients raised psychosocial topics, the unresponsiveness may have discouraged older patients from raising additional psychosocial topics.

Greene M. G., Majerovitz S. D., Adelman R. D., & Rizzo C. (1994). The effects of the presence of a third person on the physician-older patient medical interview. *Journal of the American Geriatrics Society*, 42, 413-419.

The objective of the study was to compare communication in triadic and dyadic older patient medical encounters and to determine the influence of the presence of a third person on the physician-older patient relationship. The setting was a hospital-based primary care group practice in a major urban teaching institution. Participants included patients 60 years and older who were making their first visit to one of the 19 study physicians.

In a sample of 96 audio taped initial medical visits, 15 encounters were triadic. These 15 cases were matched with 15 dyadic interviews for gender and race of both patient and physician. The matched audiotapes were coded with the Multi-dimensional Interaction Analysis (MDIA) system. There were not significant changes on the part of the physician in reference to quality of responsiveness, number or types of topics they raised, or content of physician's talk when dyadic and triadic interviews were compared. In contrast, there were differences in both the content and the process of the medical visit for patients when a third person was present. Older patients raised fewer topics, were less responsive to the topics they did raise, and were rated as less assertive and expressive in triadic interactions. Also, there was less joint decision-making and shared laughter in triadic medical visits. These findings suggest the power relations are different in the triadic versus the dyadic encounters. Also, patients were frequently excluded from conversations in visits in which a third person was present. The presence of a third person in the medical encounter changed the interactional dynamics of older patient medical interviews and may influence the development of a trusting and effective physician-older patient relationship.

Haley, W. E., Clair, J. M. & Saulsberry, K. (1992). Family caregiver satisfaction with medical care of their demented relatives. *The Gerontologist*, *32*, 219-226.

Eight-eight family caregivers recruited through a local Alzheimer's society were asked about their satisfaction, expectations, and experiences with physicians over the course of caregiving. Respondents were primarily urban, white, female spouses and daughters with relatively high education and income. Demented patients averaged 77.6 years in age. Over half of the patients were deceased, so caregivers responded retrospectively to questions that, for many, focused on events occurring years in the past.

Caregiver satisfaction with the initial medical evaluation was rated from 0 (very dissatisfied) to 4 (very satisfied). Mean satisfaction scores were 2.39 for information received about the diagnosis, 2.62 for general satisfaction with the physician, and 2.71 for overall experience with physicians. Caregivers also responded to 32 pairs of questions about their expectations and experiences in encounters with physicians who cared for their demented relatives. Discrepancy between expectations and experiences on the paired items formed the basis for assessing caregivers' satisfaction on three subscales: information about illness, physician sensitivity to emotional issues (affect) and physician control. Caregivers reported their experience levels (from low to high) as information, affect and physician control. Caregivers had significantly higher expectations for information than for affect and control. In all three areas, experience was significantly lower than expectation. Experience significantly differed from expected care on 31 of the 32 comparisons. Experiences of higher levels of information and affect and lower levels of control were moderately correlated with overall satisfaction. Correlations with overall satisfaction were higher than correlations of experiences with satisfaction with the first physician or satisfaction with diagnostic information, but all correlations of experience with satisfaction measures were statistically significant. Ratings of expected care were unrelated to satisfaction measures with the single exception that caregivers with higher expectation for information had lower overall satisfaction with physicians. Families gravitated toward a physician they perceived as competent, caring and attentive to their concerns, thus leading to satisfaction with the health care provider.

Hall, J. A., Milburn, M. A. & Epstein, A. M. (1993). A causal model of health status and satisfaction with medical care. *Medical Care*, *31*, 84-94.

In order to test for causal paths between patients' satisfaction and their health status, 526 patients of the Rhode Island Group Health Association, a staff model HMO, were interviewed at baseline and 12 months later. Eligible patients were those over age 74 or patients aged 70-74 who were rated by their primary physicians as "very likely" or "probably likely" to deteriorate. The patient sample had a mean age of 77 years, was 51% male, with a model educational attainment of 5-8 years of school. Most (74%) reported their present income level as sufficient, and 30% lived alone. The authors assessed patients' cognitive status, emotional health, social activity, functional abilities, overall self-perceived health and satisfaction with medical care. After

preliminary analyses, functional ability (body care and movement, mobility, ambulation and home management scales of the Sickness Impact Profile) and overall self-perceived health (6 items developed for the Rand Health Insurance Study) were selected for structural equation modeling. The four functional ability scales were strongly intercorrelated and were therefore averaged to form a physical function index. Age, sex, lives alone or not, prestige of occupation, educational level and income sufficiency were used as covariates. Satisfaction with health care providers was measured by 12 items covering overall satisfaction, amount of contact with providers, informativeness of providers, humaneness of providers, technical competence of providers and relief of worry.

The authors conducted a series of multiple regression analyses using baseline and 12-month satisfaction scores in combination with various health status variables. From these analyses, they determined that only functional ability and self-perceived health were associated significantly over time with satisfaction. The authors then estimated models using LISREL and determined that there was a significant path over time from health status to satisfaction, while paths from satisfaction to health over time were not significant. Results indicated that health status may influence satisfaction with health care providers over time rather than the reverse. The authors speculated that medical care providers play a role in producing these effects: Providers like healthier patients and may verbally and nonverbally express this affect to their patients. Patients return good feeling to physicians whom they perceive as treating them with kindness and consideration. Therefore, patient health status may affect patient satisfaction through the mediating effect of physicians' behaviors.

Hall, J. A., Roter, D. L. & Katz, N. R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care*, *26*, 657-675.

This article reports a meta-analysis of 41 studies published in the English language that relate data on the communication process in medical encounters collected by recording devices or neutral observers to external variables such as outcomes of care and various patient and physician background variables. Six external variables were included in the analysis: patient satisfaction, compliance, recall, social class, gender and age. Psychiatric visits were excluded.

The mean number of providers, almost all actual or future physicians, was 21; the mean number of patient encounters was 157. The setting was an outpatient department in 58% of the studies, private office in 27%, and the remainder were "other" or unknown. Two coders agreed on five provider behavior categories: information giving, questions, competence, partnership building and socioemotional behavior. A sixth process category, total amount of communication for provider and patient, was also included.

All correlations between communication process variables and external variables were extracted and normalized using Fisher's z-transformation, and a combined probability for each subset of results was computed. Greater satisfaction was highly significantly associated with more provider information giving. The relation between information giving and compliance was considerably weaker by still statistically significant ($p<.0005$). Greater compliance was associated with more information given. Giving more information was very significantly predictive of greater patient recall/understanding. Patients' social class had a positive relation to providers' information giving ($p<.01$). Providers gave more information to female than to male patients. Patient age was

positively correlated with information giving, both for pediatric and adult samples. Provider question asking was not significantly related to patient satisfaction. Provider question asking was associated with poorer patient compliance and recall/understanding.

The authors classified studies of provider competence into task and interpersonal competence. Greater technical competence was positively associated with patient satisfaction. Partnership building occurred when the provider tried to elevate the patient's status within the relationship and increase patient participation. Satisfaction and recall/understanding were positively related to partnership building. Compliance showed no significant relation to partnership building because the two components of partnership building (enlisting patient input and taking a less dominant role) were related in opposite directions. Presenting a less authoritarian profile had a detrimental effect on compliance whereas enlisting patients' involvement enhanced it.

Greater satisfaction was associated with more nonverbal immediacy and attention. Greater recall was also associated with immediacy. Patient gender, age and ethnicity were unrelated to providers' nonverbal behaviors. Positive talk was related to satisfaction, compliance and recall, but for recall the correlations were very small. More communication (length of interview, number of utterances) predicted greater satisfaction. Female gender and age were positively associated with the amount of communication. Of all the provider variables studied, only question asking showed no relation to patient satisfaction. In comparison, compliance was only weakly related to provider behavior.

Older patients received more information, more total communication, more questions about drugs, more courtesy, and less tension release than younger patients. Older patients were also more satisfied with their health care.

The authors proposed a theoretical framework of reciprocity to predict associations between patient and provider behaviors. Behaviors in the task or socioemotional domain are usually reciprocated by behaviors in the same domain. However, reciprocity does not hold across domains. Provider task behaviors predict patients' socioemotional behaviors (satisfaction) but providers who are socioemotionally competent will not predict a patient's satisfaction with that provider's task proficiency. Evidence of provider task competence is necessary to motivate a patient to perform tasks associated with the patient role (compliance, recall).

Hasselkus B.R. (1992). Physician and family caregiver in the medical setting: negotiation of care? *Journal of Aging Studies*, 6, 67-80.

To determine the relationship that exists between the physician and elderly patient caregiver, 40 clinic visits including the physician, elderly patient, and family caregiver were audio-taped and analyzed for topic themes and exchanges of meaning. The study took place in the general internal medicine and geriatric clinics of a university-affiliated hospital in the Midwest. For the study, patients over 60 years of age, who were accompanied by a spouse or blood relative in the examining room were selected.   Physicians in the study were affiliated with the general medicine or geriatric clinics. No encounters studied were initial encounters between the patient and physician.

A typology of 26 problem situations in caregiving was used to organize the transcribed data. With the data arranged by problem situations, the authors qualitatively analyzed the data within visits and across visits for topical themes and exchanges of meanings.

Caregivers took a primary role in providing information concerning medical history, symptoms and status. Caregivers also tended to supplement the patient's report of symptoms and seemed to feel a strong sense of responsibility regarding medication management. Both caregiver and physician promoted their own agendas for structuring the visit. The large extent to which the caregivers contributed to traditional physician domains of care during visits [diagnosis, interpretation of symptoms, treatment recommendations] was unexpected. The presentation of self as practitioner by the caregiver differed from the physician's view of caregiver as a patient-substitute. Eating, moving around and risk were the most prominent life world topics discussed in the data as a whole. In general, the participants, physician, caregiver, and patient, discussed very little about the social context of the illness and care during the medical visit.

Hasselkus B.R. (1994) Three-track care: older patient, family member, and physician in the medical visit. *Journal of Aging Studies*, 8, 291-307.

The purpose of this study was to examine the patterns of interaction that ensue in the physician-older patient-caregiver medical visit that reflect uncertainties about the capabilities and responsibilities of each person in this triad. Forty triadic interactions were audio taped and transcribed. The tapes were then analyzed for interactive behaviors that support patient self care capabilities and those that support dependency, and patterns of interaction related to the patients' cognitive or sensory impairments. Data was collected in the internal medicine and geriatric clinics of a Midwestern university hospital. The 27 patients ranged in age from 64 to 91 years old and were accompanied by family members. Eleven physicians participated in the study.

As an interpreter, the caregiver engaged in incidents of correcting, adding to, prompting, answering for, and paraphrasing--all potential signals to the physician that the patient needed assistance. Behavioral clues that conveyed caregiver beliefs of incompetence in the patient occurred when the caregiver explicitly questioned the truth of the patient's statements, disclosed information to the doctor in spite of the patient's objections, told the patient what to say or do, or interacted paternalistically with the patient. Older patients themselves gave evidence of incapacity by talking to the doctor through the family member, deferring to the caregiver regarding responsibility for information, and checking with the caregiver for accuracy of information being requested. On the other hand, patients did exhibit behaviors advocating self care such as interrupting doctor-caregiver   dyads to ask their own questions about medications, to volunteer   information, to express their own opinions about treatments and symptoms, and to remind the caregiver and doctor about concerns such as prescription needs. Overall, the specific behaviors of caregivers and patients varied according to the degree of impairment of the patients. Ambiguities associated with independent and dependent self care behaviors by both the patient and caregiver may lead to underestimations of the capacity of older patients by all parties involved in the triad.

Haug, M. R. (1981). *Elderly patients and their doctors.* New York: Springer Publishing Co.

   This book contains edited versions of presentations from a 1979 symposium on doctor-elderly patient interactions. Theoretical models for understanding physician patient relationships include the biopsychosocial model (Engel) and the sick role model (Coe). In identifying obstacles to successful doctor-elderly patient relationships, one must consider characteristics of the patient, the physician and the environment. These barriers include financial obstacles, status differences between patient and physician, insufficient interaction time (Shanas), lack of physician training in geriatrics, ageist physician attitudes (Williams), inadequate knowledge, and inadequate transmission of information from physician to patient (Fine). Patient characteristics were discussed by Maddox (functional status), Kart (symptom experience and attribution) and Weiss (problems of misdiagnosis, dementia, and dependency). Marshall and Breslau discussed physician characteristics affecting relationships with older patients. Contexts of care which affect the relationship include the health care team (Estes), coalitions which may develop when a patient brings a companion (Rosow), different treatment sites such as office, hospital or nursing home (Goss) and power and dependency relations (Bloom and Speedling). The book concludes with discussions of implications for medical practice (Ford) and areas needing further research (Lawton).

Haug, M. R. & Ory, M. G. (1987). Issues in elderly patient-provider interactions. *Research on Aging*, *9(1)*, 3-44.

   This article reviewed literature concerning relationships between elderly patients and health care providers. Physician characteristics (age, gender, practice style, attitudes), patient characteristics (age, gender, race, attitudes), and organizational setting were found to be relevant to the course and content of patient-physician interactions. Communication process and communication outcome were addressed.

   Few older doctors are women, although women constitute the majority of their older patients. Gender match between doctor and patient fosters rapport and facilitates disclosure. Older doctors were trained when the dominant doctor/submissive patient model was prevalent. Younger doctors, while often schooled in social science and geriatrics, may have ageist attitudes. A growing proportion of younger physicians is female. Women physicians have been found to be more egalitarian and sensitive to relationships. A technological practice style, characterized by computer-generated decision trees, is unlikely to be satisfactory to an older patient who places value on a physician's warmth and sympathy. Even though older patients are often slower to undress and provide information, physicians spend less time with their older patients. Physicians, reluctant to deal with the uncertainties of chronic illness and issues surrounding the dying process, may transfer care responsibilities to the family or a nursing home.

   Differential health care experiences of cohorts of older persons (65-74, 75-84, 85 and over) may affect doctor-patient relationships. The cohorts have also had differential exposure to economic depressions, war, and access to education, all of which may affect their attitudes toward self-care and skepticism about the efficacy of medicine. Older patients are more likely to have chronic disease and multiple impairments; dementia is highest among the oldest-old. Older persons may feel their health problems are inevitable and immutable. A patient's estimates of his or

her condition and its treatment may not coincide with those of the doctor. Physicians need to recognize that older persons may experience stressful life events without having necessary social supports and coping resources. Older persons desire independence and respect. The duration and severity of the presenting symptom will influence the doctor-patient interaction.

The practice setting influences the doctor patient interaction: the demise of home visits puts the patient on the doctor's turf. In nursing homes or hospitals, patients have little choice about being seen by doctors, whereas patients can initiate or continue relationships when encounters take place in physician offices. HMO doctors tend to be younger and more amenable to egalitarian interaction. When organizations have as their prime goal the maximization of profit, the amount of physician time allotted per visit may decrease, and visit time affects the nature of the doctor-patient interaction, especially for older patients. Other situational factors affecting interactions include the presence of a family member and fragmented relationships due to geographic mobility of patients and specialization of physicians.

Process issues that affect doctor-patient interactions include differing expectations and goals for the encounter, uncertainties felt by both doctor and patient, the type of interaction, physician sensitivity, and communication modalities. Older people may find it difficult to interact with physicians on an egalitarian basis. Older people need explicit directions concerning medications including an explanation of the medication's purpose. Older patients want information but are less likely than younger patients to want to participate in medical decision-making. Impaired hearing and vision can impede communication, while mobility deficits can slow a patient and lengthen the interaction.

Communication outcome issues include patient compliance, satisfaction and service utilization. Noncompliance is greater with multiple medications and complex regimens, situations frequent for older patients. Intentional underuse of medications is common with older patients. A doctor's autocratic behavior may erode patient trust and cause patients to conceal noncompliance. While older persons indicate they are more satisfied with their medical care than are younger persons, there has been no satisfaction research looking at age and differences in physician-patient interactions. There is wide variation in the number of physician visits by the older population and no studies tying utilization of medical services by elderly patients to aspects of previous medical encounters.

Although the number of studies focusing specifically on interactions of elderly patients with their physicians is sparse, the common theme to emerge was the older patient's need for respect and dignity in the medical encounter.

Kaplan S.H., Gandek B., Greenfield S., Rogers W. & Ware J. (1995). Patient and visit characteristics related to physicians' participatory decision-making style: results from the medical outcomes study. *Medical Care*, 33, 1176-1187.

The article identifies specific patient and office visit characteristics that influence mutual decision-making behaviors between physicians and patients. The data for this article was extrapolated from the Medical Outcomes Study which is a 4-year longitudinal observational exploration of the implications for patient outcomes as they relate to various aspects of medical care. A sample of 8,316 patients was surveyed over a 9-day period in 1986 to determine patient decision-making (PDM) styles of physicians. Research was conducted with 344 physicians in solo

practices, multi-specialty groups, and health maintenance organizations located in Boston, Chicago, and Los Angeles. The instrument utilized for the study was the Patient Screening Questionnaire which asked patients to rate their physician's propensity towards three aspects of PDM style: 1) involvement of patient in treatment decisions; 2) sense of control over medical care given to patient; 3) request for patient to take some responsibility for care.

Age, education, ethnicity, gender, tenure of physician-patient relationship and length of encounter correlated with PDM during the medical interview. Elderly patients (age ≥75), and young adults (age ≤30), minority patients, patients with high school education or less, and male patients had the least participatory visits with their physicians. In addition, male patients were less participatory during encounters with male physicians as compared to female physicians. In terms of office visit characteristics, increases in both length of the encounter and tenure of the physician-patient relationship correlated with increased prevalence of participatory PDM style. For the subgroup of patients 75 years of age or older, PDM did not vary with tenure of the physician-patient relationship or length of office visit, thus suggesting that it may be age alone rather than some other age-related patient characteristic that modifies PDM style. The researchers emphasize that the significance of this data relates to recent studies that have observed that patients of physicians who encourage them to participate more actively in treatment decisions have more favorable health outcomes. Recognizing those at risk for suboptimal interpersonal care may be a step in improving the management of patient care.

Kaplan, S. H., Greenfield, S. & Ware, J. E., Jr. (1989). Assessing the effects of physician-patient interactions on the outcomes of chronic disease. *Medical Care*, *27(suppl. 3)*, S110-127.

This study reported results of four clinical trials among chronically ill patients demonstrating that better health as measured physiologically (blood pressure, blood sugar), behaviorally (functional status) or subjectively (patient evaluations of overall health status) was consistently related to aspects of physician-patient communication. The authors discussed reasons why patient satisfaction and patient compliance with therapeutic regimens were not adequate indicators of effective physician-patient communication. Physiologic outcome measures are not available for many chronic illnesses such as rheumatoid arthritis and may contribute only minimally to an understanding of a patient's overall health status. Generic measures of health status (functional status, subjective evaluations of health status) provide a comprehensive scope and tap the target that best fits the goals of physician-patient communication, the patients' sense of their ability to perform usual daily routines and their overall sense of well-being. These generic measures are, therefore, appropriate outcome measures for assessing the effectiveness of patient-physician communication.

Data came from three separate randomized controlled trials utilizing patients with ulcer disease (n=45), hypertension (n=105) and diabetes (n=59) and a fourth controlled trial utilizing breast cancer patients (n=43). Patients with ulcer disease were chosen from rosters of a Veterans Administration hospital outpatient clinic; hypertensive patients came from a community free clinic; diabetic patients attended a clinic at a university teaching hospital; and breast cancer patients were postmastectomy patients scheduled to receive adjuvant chemotherapy at several private office practices. Mean ages were 55 years for ulcer patients, 54 years for hypertensives, 50 years for diabetics and 47 years for breast cancer patients.

At enrollment, audiotape recordings of the physician-patient encounter were made for each patient. Patients also completed a questionnaire measuring health status, preference for active involvement in medical decision making, knowledge of disease, and satisfaction with care. Baseline physiologic measures were collected for hypertensive and diabetic patients. At their next visit, patients were assigned to experimental or control groups. After reviewing with experimental group patients their medical records and the diagnostic and treatment strategies physicians use in their illnesses, research assistants coached patients to ask more questions and to participate in the decisions about their own care. Control group patients were given standardized written materials discussing the etiology, prevalence, and nature of their illness and the necessity of self-monitoring and self-care. The physician encounter immediately after the intervention (experimental or control) was tape recorded. Physicians were blind to group membership of their patients. The intervention was again administered at the patient's next (3rd) visit and this visit was also tape recorded. Physiologic measures were obtained for hypertensive and diabetic patients. Breast cancer patients kept monthly symptom checklist diaries of chemotherapy-related symptoms. From 8 to 12 weeks after the last intervention session, patients were mailed a second questionnaire similar to the first with the addition of the 13-item shortened version of the RAND Functional Status Questionnaire. Tape recordings were coded by utterance into 30 categories modified from Bales' system and collapsed into the three categories: control, communication or affect. The authors derived indicators for the style of physician-patient communication as well as an index of patient effectiveness, communication ratio, and pattern of communication (physician direction, patient direction, affect/opinion exchange).

Higher functional status and subjective health status evaluations were consistently related to patient conversational behavior during the baseline office visit. Patients who were more controlling during the office visit reported fewer days lost from work, health problems, and functional limitations and rated their health more favorably at follow-up. Expression of patient affect (positive or negative) and expression of physician negative affect were associated with better health at follow-up. The amount of factual information given by the patient was inversely related to health status at follow-up. Information giving by physicians was positively related to better health status at follow-up. More control by physicians was associated with poorer patient health status at follow-up. Patients whose baseline encounters had more emotion and opinion exchange had better health at follow-up. Poorer physiologic control of diabetes and hypertension at follow-up was associated with less patient control, less effective information-seeking, less patient involvement and less emotion/exchange of opinions with physicians during baseline encounters. Symptom experience during chemotherapy was less with greater patient control, patient and physician negative affect, and information-giving by patients.

Compared with controls, intervention group patients (combined sample) improved in physiological and functional status. Experimental group patients exhibited more control and were more effective in obtaining information during the post-intervention visit than did controls. For the experimental group, the physician-direction pattern of communication was reduced and the affect-opinion change pattern increased after the intervention. In short, there is a relationship between physician and patient communication behavior during a medical encounter and patients' subsequent health status. More patient control, more affect (especially negative) and more information provided by physicians were associated with better patient health status reported at follow-up.

Kaufman, S. R. & Becker, G. (1991). Content and boundaries of medicine in long-term care: Physicians talk about stroke. *The Gerontologist*, *31*, 238-245.

To explore ways primary physicians draw the boundaries of medicine as they respond to their chronically ill geriatric patients, twenty physicians who treat elderly stroke patients were interviewed. The open-ended interviews were audiotaped and transcribed verbatim. All doctors described their role as broader than strictly biomedical and viewed the practice of medicine with many elderly patients as a combination of good internal medicine and an awareness of the social circumstances and problems of their patients.

Although there is no cure for stroke, all physicians interviewed felt there was much a doctor could do to provide support and encouragement. The physician's role is to provide medical care along with nonmedical coordination, supervision, and support of the patient, family and health care team. Emphasis must be placed on quality of life, not cure. Stroke rehabilitation enables the patient to achieve as much independence as possible. In the process, patients are reintegrated into family and community life. To prevent or postpone institutionalization, a physician can make sure the patient has adequate household help and give emotional support and caregiving advice to family members. In making decisions regarding institutionalization, physicians consider the patient's health, functional ability and stamina/frailty, the existence of family support, and the patient's desire. The presence, willingness and ability of family members to manage the patient's needs are the most important factors delaying or preventing institutionalization.

When active rehabilitation therapy terminates, physicians take a more active role with patients, giving greater attention to psychological, social and practical management issues. Their primary role is to help patients adjust to living with disabilities, sometimes encouraging expressions of anger. Patients with massive strokes are treated less aggressively than in the past. All the physicians interviewed were concerned with ethical issues such as the right to die and prolongation of suffering.

Koenig, H. G., Bearon, L. B. & Dayringer, R. (1989). Physician perspectives on the role of religion in the physician-older patient relationship. *Journal of Family Practice*, *28*, 441-448.

Religious beliefs and affiliations are significant to many older people and may influence health practices. In order to determine physicians' beliefs about the role of religion in the lives of older patients and the appropriateness of addressing religious issues with patients, questionnaires were distributed to Illinois family physicians listed in the AAFP directory and to physicians attending a geriatric lecture series. 160 physicians completed questionnaires. Data included demographic characteristics and 17 items asking about beliefs and practices regarding the role of religion in older people's lives and in the physician-patient relationship. Most attitudinal responses were recorded on a 10-point Likert scale.

Most respondents were male family physicians or general practitioners from moderate-size towns. The mean age was 47.6 years. For nearly half, over 10% of their patients were aged 60 years or older. Two-thirds agreed that strong religious beliefs and activities have a positive effect on mental health; many believed it also had a positive effect on physical health. Although more

than two-thirds of the physicians agreed that religion is the most important influence on an older adult, 62.7% felt that older patients would not want their physicians to pray with them during a severe illness or emotional distress.

While ambivalent about addressing religious issues as part of a medical visit, most physicians felt that when patients indicate religious issues are important to them, physicians could address these issues, especially when a patient requests physician input. Most physicians reported that patients only rarely mentioned religious issues during a medical visit. A majority believed addressing religious issues during bereavement or impending death is appropriate even if the patient did not indicate religion was important. Only 30% of physicians felt attention to religious needs should be reserved only for the clergy or a nurse. Three-fourths believed that encouragement or support of a patient's religious beliefs was not inappropriate. The sharing of a physician's own beliefs with the patient was most frequently considered inappropriate behavior; however, most felt this behavior was not inappropriate with older patients during times of crisis. Slightly over half of physicians rarely or never encountered older patients mentioning religious issues during medical visits. One-third of physicians had prayed with patients, and, of those, 89.3% felt it helped the patient.

Physician age was negatively correlated with the belief that older patients under certain circumstances would want their physician to pray with them. Physicians who believed it appropriate to encourage patients' religious beliefs were significantly younger than those who felt such support was inappropriate. Forty percent of physicians younger than 40 years had prayed with patients compared to 22% of physicians aged 60 years and older. Physicians with more geriatric patients were less likely to believe older patients would like their physicians to pray with them and also less likely to believe prayer had actually helped their patients. This finding may be due to the high correlation of physician age with percentage of older patients in a practice. Physician gender was not related to attitudes or practices, but few women were included in the sample.

Multiple regression analysis revealed that physician attitudes and experiences were stronger predictors of normative beliefs than were demographic characteristics. Beliefs that elderly patients were receptive to shared prayer and that religion was an important influence on an older adult explained 35.2% of the variance in physician belief in the appropriateness of discussing religious issues with patients. Since the frequency of religious interactions correlated with physicians' belief in the appropriateness of addressing religious issues, it may be that some physicians create a climate responsive to patient concerns in this area, thereby yielding more patient mention of religious matters.

Labrecque, M. S., Blanchard, C. G., Ruckdeschel, J. C. & Blanchard, E. B. (1991). The impact of family presence on the physician-cancer patient interaction. *Social Science & Medicine*, *33*, 1253-1261.

In order to study physician behavior during medical interactions when a family member was present, 473 interactions between adult cancer patients and their oncologists during regularly scheduled outpatient visits were audiotaped. Ninety-nine encounters included a family member, and in 374 encounters the patient presented alone. All visits were follow-up visits. Five oncologists and 238 patients participated. Audiotapes included an average of 1.98 visits per

patient. Immediately after the consultation, patients were asked to estimate the length of time spent with the physician and to indicate their satisfaction with the visit on a visual analogue scale. Demographic and disease data (diagnosis, ECOG scale for performance status, reason for visit) were provided by physicians. Audiotapes were coded using a revised version of the Physician Behavior Check List (PBCL). The amount of time the physician spent with the patient was also recorded.

Comparisons of encounters of patients with and without a family member present showed no significant differences in age or sex of the patient. Spouses were the accompanying family member 65% of the time. Patients with a companion were more likely to have lung cancer or "other" diagnosis, whereas patients presenting alone were more likely to have breast cancer or lymphoma. Patients with family present were likely to have a poorer performance status, be undergoing active treatment, be less satisfied with the visit, and have a lower quality of life. However, further analysis revealed that patient satisfaction was related to performance status rather than presence of the family member. The time the physician spent in the room was greater for patients with a family member present.

Physician behaviors were factor analyzed to produce six factors: future treatment, current treatment, current medical status, greeting, emotional support and reassurance. Multivariate analysis of variance was conducted using presence of family and performance status as independent variables. Physicians discussed future treatment more often when a family member was present, but only with a sicker patient. Physicians discussed the patient's current medical status more often when the family was present, regardless of symptoms, and also when the patient was alone if the patient had symptoms. If the patient was alone, and sicker, the physician was less likely to greet that patient. When patients presented alone, physicians provided more emotional support to patients who were less sick, whereas there was no different in provision of emotional support for patients with family members present. In short, physicians provided more information under conditions of uncertainty, e.g. when a family member was present or when patients are symptomatic.

To separate the potentially confounding effects of family presence and performance status, a two factor ANOVA was conducted using these two independent variables. Results revealed that physicians spent more time in the room when family were present. Performance status did not affect the amount of time a physician spent with a patient. Patients perceived the physician spent more time in the room when there was a family member present. Sicker patients reported lower satisfaction; family presence did not affect satisfaction. Patients with family present reported a lower quality of life; sicker patients also reported a lower quality of life, but there was no significant interaction between the two variables.

Like, R. & Zyzanski, S. J. (1987). Patient satisfaction with the clinical encounter: Social psychological determinants. *Social Science & Medicine*, *24*, 351-357.

This study was designed to determine whether there is a relationship between fulfillment of patient requests and patient satisfaction with the medical encounter. It was also designed to determine the amount of satisfaction explained by qualities of the encounter as opposed to characteristics of the patient, the physician, and the health care system.

A convenience sample of 144 adult outpatients at University Hospitals of Cleveland Family Practice Center completed pre- and post-encounter questionnaires. Pre-encounter measures included the patient's perspective interview (PPI) which inquired about the patient's reason for the visit, concerns, expectations, sociodemographic characteristics and previous experience with the Center and the patient request for services schedule (PRFSS) which asked whether patients wanted any of 27 services and, if so, how important the request was. Post-encounter measures included a patient services received schedule (PSRS) based on the PRFSS completed by the patient and a physician's clinical perspective schedule (PCPQ) completed by the physician assessing information regarding the patient, encounter and physician's feelings toward the patient. Patients also estimated the amount of time they spent with the doctor. Both physicians and patients completed 100-point visual analogue scales to measure five aspects of satisfaction with the encounter. Due to multicollinearity, variables were collapsed into five blocks: patient sociodemographics, patient illness behaviors, patient encounter, physician encounter and health system characteristics. Hierarchical regression analysis utilizing the six best predictor variables (female gender, enrollment in Center, patient knowledge about illness from media, physician feelings toward patient, desires met and desires not met) explained 34% of the variance in patient satisfaction. At least 19% of the variance in patient satisfaction was explained by request fulfillment.

Patients desired an average of 12.3 services and felt they received 11.6. The mean number of desired services which were received was 8.4, and the mean number of desires not received was 3.9. The mean patient satisfaction score, based on the visual analogue scales, was 88.8.

Race, marital status, educational level, employment status, occupation, income, method of payment, type of illness, number of previous visits, MD level of training, MD gender, type of visit and continuity of care were unrelated to patient satisfaction. Older patients showed a trend toward increased satisfaction ($p=.06$) as did patients of lower social class ($p=.06$). Patients who felt they had spent more time with the doctor, female patients, patients with a longer period of enrollment in the Center, knowledge of presenting illness derived from the media, positive physician feelings toward the patient and increased physician satisfaction with the encounter were associated with increased patient satisfaction. Increased number of patient requests and patient desire for increased time with the doctor were associated with decreased patient satisfaction. There was a strong inverse association between desires not met and patient satisfaction.

Mahler, H. I. & Kulik, J. A. (1990). Preferences for health care involvement, perceived control and surgical recovery: A prospective study. *Social Science & Medicine*, *31*, 743-751.

This study examined perceived control and desire for health care involvement of coronary bypass patients and the association of these variables with health outcomes. Patients were 75 males ranging in age from 38 to 69 years (M=58) who underwent non-emergency coronary bypass surgery at the San Diego Veterans Administration Hospital. The sample was 90% Caucasian, with a mean education level of 11.4 years. Seventy-three percent were married, and 38% were retired.

All patients received routine preoperative preparation which included visits from the surgeon, anesthesiologist and operating room nurse. One author interviewed all patients two evenings prior to surgery, and patients completed a questionnaire the evening prior to surgery.

Perceived control was assessed by responses to a direct question during the interview. Desire for health care involvement was measured by the Krantz Health Opinion Survey (HOS). Preoperative anxiety was assessed by a short form of the state version of the Speilberger State-Trait Anxiety Inventory (STAI). Preoperative physical condition, age and education were statistical control variables. Recovery measures included number of days patient had negative psychological reactions (disorientation, depression, etc.), number of times patients took pain medications and complained of postoperative pain, ambulation activity, and the number of hours from the end of the operation until patient release from the hospital. Hierarchical multiple regression analyses were performed, first entering the control variables into the equation.

Eight-eight percent of the sample expressed at least a degree of perceived control. In terms of desire for health care involvement, the mean on the desire for information subscale of the HOS was 2.61 (SD=2.21; possible range 0-7) and the mean on the desire for behavioral involvement was 2.1 (SD=1.96; possible range 0-9). Older patients and patients who had been in poorer physical condition preoperatively exhibited fewer negative psychological reactions. Controlling for age, education and health status, patients who believed they had control over recovery and patients desiring information were marginally more likely to experience negative postoperative psychological reactions. Older patients exhibited less evidence of postoperative pain. Patients who had indicated a greater desire for behavior involvement walked more after surgery than those who desired less involvement. Patients with higher education levels ambulated less. Controlling for age, education and preoperative physical status, patients who desired more active behavioral involvement were released from the hospital more quickly. The more a patient perceived he or she controlled recovery, the sooner that patient was released. The relatively quick release of patients with greater desire for behavioral involvement was partially mediated by their greater postoperative efforts to ambulate.

McKinlay, J.B., Potter, D.A., Feldman, H.A. (1995). Non-Medical influences on medical decision-making. *Social Science & Medicine*, 42, 769-776.

A factorial experiment was conducted to assess the influence of non-medical factors on the diagnosis and treatment of two common medical conditions, chest pain and shortness of breath (dyspnea), by practitioners of internal medicine. One-hundred-ninety-two physicians individually viewed professionally produced video scenarios in which the actor-patient possessed various prespecified combinations of non-medical characteristics. After viewing each tape and accompanying data, each physician was asked to dictate a synopsis of the case including a list of working diagnosis, probabilities of diagnosis, suggested diagnostic tests, likelihood of physician ordering tests, severity of condition, impact on quality of life and recommended treatment.

The physicians were grouped into six strata, defined by practice setting (private office, hospital, or HMO) and length of clinical experience (over 15 years or under 15 years). Five dichotomous non-medical patient characteristics were manipulated as experimental conditions: sex, race(black or white), age (30 or 62), socioeconomic level (professional or working class), and coverage by health insurance (yes or no).

On the basis of chest pains, older patients were less likely to receive a primary psychogenic diagnosis and more likely to receive a primary cardiac diagnosis than younger patients. Also, among older patients, those with insurance were more likely to receive a primary

cardiac diagnosis than those without insurance. HMO-based physician diagnosis was significantly lower than the overall rate for primary cardiac diagnosis in the chest pain scenario, whereas office- and hospital-based physicians fell above the overall rate. Older patients were more likely to get a treatment recommendation of cardiac drugs than younger patients.

In the dyspnea scenario, the cardiac diagnosis was not significantly influenced by any of the patient or physician characteristics. Primary psychogenic diagnosis for dyspnea was more likely among black patients than for white. Among white patients, the frequency of psychogenic diagnosis made by HMO-based physicians was higher than for other physicians. Smoking cessation was recommended more often for females than for males, and more often by younger physicians than older physicians. The variability in decision making evidenced by physicians in this experiment was not consistent with strictly Bayesian inference (the common prescriptive model for medical decision making), inasmuch as non-medical factors intruded upon the decisions that they made. There is a need to supplement idealized medical schemata with considerations of social behavior in any comprehensive theory of medical decision making.

Morgan, D. L. & Zhao, P. Z. (1993). The doctor-caregiver relationship: Managing the care of family members with Alzheimer's disease. *Qualitative Health Research*, *3*, in press.

In order to further understand the family caregivers' perspective on the caregiver-physician relationship, the authors conducted two studies using focus group of 4-8 caregivers each. One study included 38 caregivers (6 focus groups) who had brought their cognitively impaired family member to an expert diagnostic unit within the past six months. The focus group discussions were tightly structured by the moderator and centered on the decision to seek expert diagnosis. Half the caregivers in this study had family members with relatively mild dementia symptoms and half with relatively severe symptoms. Each group was homogeneous with regard to level of patient impairment. The other study, involving 179 participants in 30 focus groups, drew participants from community sources. Participants were in later stages of caring for a cognitively impaired family member, and the study concentrated on the decision to move the family member to a formal care facility. Participants were recruited into a 2x2 design (half spouses/half adult children; half caring at home/half with the family member in a nursing home). Focus groups were mixed with regard to caregiving relationship, caregiving location or both, and discussions were relatively unstructured.

All focus group discussions were tape-recorded and content-analyzed. Researchers counted the number of times caregivers mentioned medical personnel positively or negatively. They then coded transcripts for common themes, eventually developing a template distinguishing 4 types of providers, 6 content categories and 6 specific issues. The doctor-caregiver relationship was more often mentioned by caregivers in the earlier phases of caregiving, perhaps because discussions were focused on seeking medical care. In both studies over half the total mentions of medical personnel were negative; nearly 90% of medical personnel mentioned were physicians. Caregivers in both studies were more likely to mention specialists positively and community doctors (internists, family physicians) negatively, attributing misdiagnoses, failure to diagnose and ageist behavior to community doctors. Community physicians were mentioned positively with regard to referrals, however. Caregivers emphasized the doctor-caregiver relationship, showing a negative evaluation of doctors' attitudes and equal amounts of positive and negative remarks

about their own relationships with doctors. Each set of caregivers was more positive about the set of topics that occupied more of their attention: medically-related topics in the early phases and non-medical topics in the later phases of caregiving. To the extent there was open communication, sensitivity to caregivers' feelings and responsiveness to the caregiver's viewpoint, caregivers gave a positive light to their relationships with medical personnel. Caregivers sought doctors whose attitudes and actions showed a concern for patient needs; these behaviors validated their own caregiving efforts,

The authors emphasized the importance of moving beyond face-to-face encounters when studying the physician-family caregiver relationship, since caregivers have a separate relationship with the patient. This separate relationship was emphasized by a discussion of caregivers' noncompliance with prescriptions for psychoactive medications. Caregivers felt physicians overmedicated patients to control undesirable patient behavior; high dosages of psychoactive medications sedated patients so much that they lost the last vestiges of their relationships with family caregivers. Caregivers failed to report this dissatisfaction to physicians. In short the values and decision-making processes of physicians and family caregivers differ, and these different perspectives are often not revealed during face-to-face encounters.

Ory, M. G., Abeles, R. P., Lipman, P. (1992). *Aging, health, and behavior*. Newbury Park, CA: Sage.

This edited volume, with its emphasis on aging as a process, infused the notion of process and change into the previous static treatments of health and behavior. The volume provides a foundation for discussing the general context of health care and the health and illness behaviors that older people bring to their medical encounters. The authors emphasized the complex interactions among environmental, social, behavioral and biological factors to explain and manage chronic diseases and disability. The emerging field of psychosocial geriatrics research, examining the relationship of health to behavior by addressing the origins, correlates and malleability of health-related attitudes and behaviors of older people and their caregivers, was explored in four parts of the book.

Part I examined self-, informal and formal health care behaviors. Dean discussed epidemiological and social science approaches and self-care as part of the continuum of health-related behaviors. Professional consultation is a component of the continuum of care; most medical contacts are preceded and followed by self-treatments. DeFriese and Woomert noted that we cannot clearly determine whether or to what extent informal and self-care practices substitute for formal health services; the two should be seen as complementary. Friends and family in the informal care network are often needed to support and encourage the patient to comply with recommendations of formal medical care providers. While formal medical care providers tend to focus on abnormality and deficits, often ignoring chronically ill patients when everything "medically possible" has been done, informal care providers emphasize personal growth and enable patients to deal with challenges to personal and social life. Baltes and Wahl noted that the social environment in institutions helped shaped dependent behaviors in elderly people.

Part II described biopsychosocial mechanisms linking health and behavior. Leventhal, Leventhal and Schaefer proposed a commonsense model of illness which views individuals as active problem solvers whose instrumental actions are a product of their perception, intellectual

understanding and emotional responses to a health threat and coping procedures. Older persons report higher frequencies of preventive health actions, are more compliant with treatment regimens, and are more vigilant and responsive to health threats, but are more likely to attribute symptoms to age than to illness. Kiyak and Borson discussed coping with chronic illness and disability noting that adaptation to chronic disease is a multifaceted, interactive and changing task that the patient shares with personal caregivers and professional health care providers. Older people are capable of using a diverse range of coping responses. Vogt reviewed psychobiological and epidemiological studies showing the complex relationships of age, duration and type of stress, and behavior to explain incidence, type and severity of disease.

Of particular interest to physician-elderly patient communication researchers is the chapter by Rodin and Timko which reviewed research on sense of control, aging and health. Older people often experience loss of control due to biological changes, negative labeling, observing helpless role models, and changes in social roles. Personal sense of control is associated with beneficial health effects for older people. Perceptions of control may influence whether actions are taken to prevent or remedy health problems. These actions may include gathering health-related information, engaging in self-care behaviors, being active in interactions with medical providers and showing better compliance with medical regimens. However, some measures do not separate the effects of severity of illness from the effects of taking an active role in one's health; an increased number of physicians' visits may indicate illness or may be a sign that the patient has decided to participate more actively in his or her own health care.

Part III described social and behavioral interventions. Rakowski discussed research and empirical aspects of health promotion/disease prevention programs for older persons. The interactive processes between the physical and social environment are extremely complex and poorly understood. There are potential stressors at every level. As a result, we often do not know how to intervene, when, on whom, under what circumstances, at what costs and at whose expense (Levi). Levi advocated intervention research with a participatory and systems approach.

Part IV examined implications for public policy. Estes and Rundall focused on the important social structures and health system characteristics that affect the health of the aging population such as increased life expectancy, social class, social support, access to medical care, and the organization of the medical system. Public policies have promoted costly, high tech medical services instead of adequate redress for social inequalities. Manton and Suzman discussed demographic projections specific to health and functional status. Interventions are possible to enhance the health of elderly persons and delay the onset of disability. Physician visits are expected to increase from 66 million in 1980 to 115 million in 2000, to 144 million in 2020, to 241 million in 2040. Increases in the need for physicians, nurses and home health workers to maintain current levels and patterns of service are projected. Changes in health promotion, organization of health services delivery systems and the development of new medical and caregiving technologies will be necessary to meet future demand for acute and long term care health services. The challenge at the federal level is to provide incentives for necessary changes without restrictive overregulation.

Radecki, S., Kane, R., Solomon, D., Mendenhall, R. & Beck, J. (1988). Do physicians spend less time with older patients? *Journal of the American Geriatrics Society*, *36*, 713-718.

In order to determine whether physicians spend less time with their older patients, the authors analyzed data from a series of nationwide surveys of physicians' professional activities conducted by USC School of Medicine from 1976 to 1978. Physicians received a self-administered log diary requesting information on each patient seen during an assigned 3-day period. Requested information included duration of the encounter, patient's age and sex, patient clinical problems, diagnostic tests, therapeutic procedures used, severity of the problem, and complexity of services provided. Additional data analyzed in this study included physician's specialty, age, practice arrangement, other demographic variables and quantitative practice measures such as volume of patients seen. This study used data recorded for patients 45 years of age or older. Statistical analyses included analysis of variance and multiple regression analysis.

Results show a clear continuum in the amount of time spent with patients in three age groups (45-64, 65-74, 75+) with decreasing time spent as age increases. Compared with patients in the 45-64 age group, general practitioners spend over one minute less with patients over 75, internists over two minutes less, and cardiologists three minutes less. For hospital care, time spent with the 75+ group is three or more minutes shorter, except for general practice physicians. Controlling for the complexity of the case did not alter age-related patterns for follow-up visits. There were no significant differences in length of first encounters with patients in different age groups.

Controlling for patient and practice variables, regression analysis revealed that only for general practitioners was age a significant variable in explaining length of encounter for nonhospitalized patients. Increased number of previous visits for a particular problem was associated with decreased encounter time in both general and family practice. Encounter time was inversely related to the number of patients seen per week and positively correlated with severity of the patient's problem and the number of diagnostic tests. Group practice was negatively related to outpatient visit length only for internists, while institutional practice was positively correlated with visit length. The presence of a nurse practitioner or physician assistant was associated with shorter visits.

Results showed a tendency for physicians to spend less time with older patients for some types of follow-up care. Since older patients see physicians more often than those aged 45-64, shorter individual visits may not result in a shorter time spent with a physician during the course of a year. Shorter encounter times were associated with more frequent visits for the same problem. Physicians who saw larger proportions of older patients (reflected in Medicare billings) did not show significantly shorter encounter times. Encounter time was positively associated with a more complicated case, the number of problems addressed during the visit, and the number of diagnostic tests ordered. Thus diagnostic tests were not used as substitutes for time spent with patients.

Rost, K., Carter, W. & Inui, T. (1989). Introduction of information during the initial medical visit: Consequences for patient follow-through with physician recommendations for medication. *Social Science & Medicine*, *28*, 315-321.

This study was designed to determine how doctors and patients negotiate what information is relevant in a medical encounter and how the introduction of information relates to patient adherence to physician recommendations for medication. Data was obtained from

audiotapes of 45 initial visits between male internists and male patients at a Veteran's Administration general medicine outpatient clinic. One criterion for inclusion was that the patient was given a prescription for a new or previously prescribed medication during the visit. A modification of Longabaugh's REA interactional process analysis system was used to code the tape-recordings. The unit of analysis was the interact, a segment of communication reflecting the exchange of a resource between participants. The REA characterizes multiple adjacent utterances in relationship to what each partner is requesting from the other and provides to the other. The four major coding categories were: clinician seeks-patient offers, patient offers-clinician accepts, clinician offers-patient accepts and patient seeks-clinician offers.

The authors made separate estimates of bi-directional introduction of information for the history, examination and concluding segments of the encounter by coding 30 random interacts from each visit and assigning each to one of the encounter segments. Dominance was defined as the relative frequencies with which physicians and patients initiated interacts. Patient adherence was assessed by 3 months of patient prescription refill-obtaining behavior for all medicines prescribed during the visit.

Patients averaged 58.8 years of age and 11.2 years of education. Patient education was related to patient follow-through but not to bi-directional introduction of relevant information. Total number of medical problems, number of clinic visits in past year, patient age, length of visit and physician training were not related to patient follow-through.

Physicians dominated the introduction of relevant information more during history-taking than during the examination segment. The more the patient volunteered information as well as answered questions, the greater the subsequent patient adherence to medication recommendations. The frequency with which patients provided information or behaviors sought by the physician during the examination was negatively related to subsequent patient adherence, whereas patient offering during the examination was positively related to adherence. The relationship between bi-directional introduction of relevant information and patient follow-through was especially strong when recommendations were solely for new medications. Physicians' interactional dominance was not related to patient adherence.

The degree to which patients independently volunteered information as well as answered questions during the examination explained over 50% of variance in follow-through by the 15 patients receiving new medications. Part of the information patients perceived as relevant involved small talk and thus included getting to know the doctor as a person. While patients may voice a comparable number of utterances, they are at a disadvantage in getting their viewpoint across when most of their utterances are in response to physicians' questions.

Rost, K. & Frankel, R. (1993). The introduction of the older patient's problems in the medical visit. *Journal of Health and Aging*, 5, 387-401.

Recognizing that older patients must often choose which of multiple symptoms or concurrent illnesses to bring to a doctor's attention, the authors explored whether important problems are not addressed because patients choose not to raise them or because patients intend to raise them but do not. Subjects were 100 patients aged 60 years or older who had been diagnosed with diabetes for at least one year but with no life-threatening medical problems. Patients were making return visits to one of two male primary care internists. Based on year of

birth, patients were assigned to a control condition or to an experimental condition where they participated in an extensive pre-visit interview. All medical encounters were tape-recorded, and each patient completed a background questionnaire which asked for sociodemographic and health status information. Patients in the experimental condition also participated in an interview where they were asked about problems they intended to discuss with the doctor and were also asked whether they had experienced any of 25 medical problems and 18 psychosocial problems. A measure of diabetes severity was determined for each patient by reviewing medical records.

Tape recordings were analyzed using the Multi-Dimensional Interactional Analysis System (MDIAS). Problems raised during the interview were assigned a unique problem identifier that paralleled the problem categories included in the pre-visit interviews. Agenda-relevant problems were those patients said they intended to discuss. Non-agenda relevant problems were those patients did not originally specify.

The primary subjects included in the analysis were those (n=50) in the experimental group (average age 69.8 years, 60% female, 48% high school education or less, 90% white, diagnosed with diabetes for a mean of 11.3 years). Medical visits lasted an average of 10.8 minutes. In the pre-visit interview, patients reported an average of 3.6 of their 8.8 current problems had never been discussed with the doctor. The average number of problems patients intended to raise was 2.9, and 84% of subjects intended to raise at least one problem. Patients focused both their agendas and the problems they raised almost exclusively on medical as opposed to psychosocial problems. At the end of the visit, patients and physicians had not addressed an average of 27% of the patient's current problems. Over half (56%) of patients had at least one important medical problem that was never raised; 60% had at least one important psychosocial problem that was not raised. The most frequent undiscussed problems were diabetes-related symptoms, depression/anxiety, and compliance problems. Sociodemographic characteristics and visit length did not predict the number of undiscussed problems patients had at the end of the visit.

Of the 42 patients in the experimental condition who identified at least one problem they intended to raise, the patient's full agenda was raised in 74% of the cases, usually by the patient. The problem identified by the patient as most important was not the problem 70% of patients introduced initially. Patients whose entire agenda was introduced had shorter agendas and a higher occupational status. Patients who received the pre-visit interview raised an average of 7.6 additional problems which they had not included in their agenda for the visit. There was a trend (p=.07) for patients who participated in the pre-visit interview to introduce more problems during the encounter.

Roter, D. L. & Hall, J. A. (1989). Studies of physician-patient interaction. *Annual Review of Public Health*, *10*, 163-180.

This chapter presented a review of studies of communication processes, excluding those studies based on physician or patient reports and research involving language or discourse analysis. Several studies utilized three basic frameworks for coding medical interaction: Bales' interaction process analysis, Roter's interaction analysis system and Stiles' verbal response mode. Studies comparing the different coding systems were reviewed as were studies coding particular kinds of communication, most often involving exchange of information between doctor and patient. Although there is a strong positive relation between the amount of information offered by

the physician and the absolute amount recalled by the patient, as the amount of information increases, the proportion recalled goes down. The authors reviewed studies coding affect in the medical visit, noting that physician affect has been related to patient satisfaction and appointment-keeping compliance.

The authors conducted a meta-analysis of 60 studies providing quantitative data on doctor-patient communication and reduced the variable descriptions to six mutually exclusive behaviors: information-giving, information-seeking, social talk, positive talk, negative talk and partnership-building. They then discussed a framework for viewing the therapeutic relationship based on task-focused and socioemotional dimensions of behavior for both patient and physician. Based on the premise that all face-to-face behavior carries affective content, they defined the affective character of the interaction on three levels: intrinsic, conveyed and interpreted. Of all patient variables considered, satisfaction was most consistently related to provider behavior and was best predicted by the amount of information given to patients by providers during medical encounters. The concept of reciprocity explained the correlations between corresponding patient-provider domains of communication. Physician task behaviors and patient task behaviors reciprocated one another as did patient and physician socioemotional behaviors. The authors believe that physician task behaviors, especially information-giving, also carry socioemotional significance for patients.

Finally, the authors reviewed intervention studies which attempted to change physicians' communication behaviors, demonstrating that empathy skills can be effectively taught to medical students and physicians. Intervention with patients showed that patient communication can also be changed, yielding substantive differences in quality of diagnosis and treatment, patient recall, satisfaction and compliance.

Evidence shows doctors may be accommodating patients with a more egalitarian relationship and tolerance for patient input in decision-making. The implications of these changes must be considered in theoretic conceptualizations of the doctor-patient encounter.

Roter, D. L., Hall, J. A. & Katz, N. R. (1988). Patient-physician communication: A descriptive summary of the literature. *Patient Education and Counseling*, *12*, 99-119.

In order to evaluate the state of the art of measuring provider-patient communication and to provide a synthesis of research findings, the authors summarized the results of 61 independent studies reported in 80 articles published between 1962 and 1986. Each study reported recording of interaction processes using neutral observers, audiotape or videotape. Communication process variables were categorized as information-giving, information-seeking, social talk, positive talk, negative talk and, for physicians only, partnership-building. Reflecting the fact that physician interaction was studied in almost double the number of studies than patient interaction, many more physician variables were identified than patient variables.

Study samples were highly variable, ranging in size from 4 to 2500 patients and from 1 to 143 physicians. Patient populations were slightly more female than male and either racially heterogeneous or predominantly white. Patients were largely low or middle income with many studies utilizing predominantly low income patients. While physician specialty and experience were often reported, gender, age and race were reported less frequently. The most common setting was a hospital out-patient clinic or ambulatory care center; there were few studies of

prepaid group practices. Slightly over 50% of the studies reported the prior relationship between physician and patient; first visits or a mixture of first and repeat visits were most commonly studied.

Two-thirds of the studies utilized a patient questionnaire, usually following the visit, to measure satisfaction, recall, compliance or patient-physician agreement on the goal of the encounter. Provider questionnaires were used in only 9 studies. Experimental manipulation, used rarely, largely consisted of physician training programs. Interventions to change patient behavior involved coaching to ask questions and become more involved in the encounter and self-care. Observation methods included audiotape (50%), videotape (25%) or impartial observers (25%). There is a trend away from using impartial observers perhaps due to the necessity of "hard copy" for analysis by complex coding systems. Physician training research tended to utilize videotape.

Over half the studies employed analysis systems designed for that study. Commonly used process analysis systems were those of Bales, Roter and Stiles. Non-verbal communication was less frequently addressed. The most commonly reported element of the interaction was its length, although this element was only reported in about one-third of the studies. The average length of interviews ranged from 5 to 46 minutes (mean=15.78 minutes), although English studies reported averages between 5 and 6 minutes per visit. Patients contribute about 40% of the talk and physicians contribute about 60%. Roughly half of patient interaction is devoted to information-giving, 20% to positive talk and smaller percentages to question-asking, social conversation and negative talk. Information-seeking is much more common for physicians and is second to information-giving. Partnership-building, not found for patients, comprises 10% of physician talk.

One-way ANOVA using studies as sampling units nested within pertinent classifying variables indicated that whites receive more information, more positive talk and fewer questions, although there was no difference in length of visit by race. Clinic patients are asked more questions and given more partnership statements than private patients. New patients receive more positive talk than repeat patients. Visits are nearly twice as long in clinics than in private practice, and visits with staff physicians are shorter than visits with physicians in training.

There is some evidence that the doctor-patient relationship is evolving; patients are becoming more consumerist and physicians may be accommodating them with a more egalitarian relationship and increased tolerance for patient participation in decision-making.

Silliman, R. (1989). Caring for the frail older patient: The doctor-patient-family caregiver relationship. *Journal of General Internal Medicine, 4*, 237-241.

When patients become more frail, the doctor-patient relationship must expand to include their family caregivers. Family caregivers are frequently drawn into the clinical setting, whether they want to be or not and may even become "hidden patients" due to the stresses of caregiving.

Using dementia as an illustration, Silliman described her pragmatic approach to the cultivation of the triadic relationship. The physician must be sensitive to the negative consequences of dementia both for patient and for caregiver. The physician should meet individually with both patient and caregiver, as well as with both together. The patient's physician may be the first to identify caregiver stress and/or depression. The challenge for the physician is to integrate care for both patient and family caregiver, yet preserve the autonomy of each.

Physicians should give patients and families information about the disease, its natural progression and anticipated future care needs. Patients and families should also have the opportunity to talk about the meaning of the illness to them. Physicians are usually in the best position to respond to these needs. When clinically appropriate, physicians should discuss advance directives with patients.

Family caregivers require guidance in setting limits once patient judgment becomes impaired. As patient behaviors worsen and interpersonal aspects of the caregiver-patient relationship deteriorate, physicians should intervene with both patient and caregiver.

Smith D. H., Cunningham K. G., Hale W. E. (1994) Communication about medicines: perceptions of the ambulatory elderly. *Health Communication*, 6(4), 281-295.

Two surveys, concerning over-the-counter medicines (OTC) and prescription medicines (Rx), were used to assess elderly patient perceptions of physicians and pharmacists' communication about medicines. The study respondents, aged 65 to 93 years old, were accessed through a Geriatric Research Center.   Of the 150 OTC and 300 Rx questionnaires that were mailed out, 110 and 150, respectively, were returned. The questionnaires assessed the source and type of medication information,   problems with medicines, context of communication about medicines, specific topics discussed, and attitudes toward communication about medicines.

Subjects overwhelmingly reported that doctors were their most utilized and preferred source of information about medicines. They described their doctors' communication in positive terms, but they did not describe their doctors as sharing in the decision-making process. During interactions with both physicians and pharmacists, patients were most likely to have brought up concerns if the topic of medications was already being discussed. Subjects also reported that they would prefer more discussion of side effects.   The authors felt that campaigns to reduce the too frequent misuse of medicines by older patients should take these perceptions into account and are likely to be most effective if they center on improving physicians' communication with elderly patients about medicines.

Street, R. L., Jr. (1991). Information-giving in medical consultations: The influence of patients' communicative styles and personal characteristics. *Social Science and Medicine*, *32*, 541-548.

To examine the degree to which physicians' information giving was uniquely related to patients' communication styles (question-asking, opinion-giving, expressiveness) and patients' personal characteristics (age, sex, education, anxiety), the author analyzed audiovisual recordings of 41 physician-patient consultations at a family practice clinic. Patients ranged in age from 17 to 72 years, averaging 38 years. Twenty patients were male; 21 were female.

Patients completed a post-encounter questionnaire asking for demographic information and assessing anxiety. Five verbal behaviors were coded from the videotapes: physician's information-giving (diagnostic-health, treatment, procedural matters); physician's partnership-building; patient's opinion-giving, patient's affective expressions; and patient's question-asking.

Patients averaged 4.8 questions, 6.7 expressions of affect and 7.5 opinions; doctors averaged 53.4 informative statements and 3.4 partnership-building utterances per consultation. Patient opinion-giving was correlated with both question-asking and affective expressions. There were trends for physicians to exhibit more partnership-building with older (p<.08) and anxious (p<.09) patients.

The general regression model which included the 4 patient characteristics and 3 patient communication behaviors explained 53.3% of the variance in physician information-giving. Doctors' informativeness was uniquely and strongly related to patient question-asking and expressions of affect. Of the patient characteristics, only anxiety uniquely explained a significant amount of variance in physician information-giving. However, there was a trend for younger patients to receive more information than older patients (p<.07). For the information-giving subcategories, patient question-asking uniquely predicted diagnostic-health information; patient question-asking and expression of concerns predicted treatment information; and patients' anxiety predicted procedural information. Patient demographic characteristics were not as predictive of physician communication behaviors. However, more educated (p<.05), more anxious (p<.03) and to some extent younger (p<.09) patients tended to receive more diagnostic-health related information.

The author related differences in patients' communicative behaviors to patients' personal characteristics and physicians' use of partnership-building utterances. Patient question-asking was not predicted by any of the variables. Patients' affective expressiveness was strongly positively related to physician partnership-building and patient educational background. More opinionated patients were also more educated, older, male and received more partnership-building utterances from physicians.

The author concluded that through their communication styles, patients can exert considerable influence on the amount of information received from physicians.

Thorne, S. E. & Robinson, C. A. (1989). Guarded alliances: Health care relationships in chronic illness. *Image: Journal of Nursing Scholarship*, *21*, 153-157.

This article presented results of a multiphased qualitative investigation of the patient perspective on evolution of health care relationships in chronic illness. Audiotapes of intensive interviews with 77 informants (patients with chronic illness or their close family members) and field notes provided the data. Nine informants were over 65 years of age. A range of chronic illnesses were included including cardiovascular conditions, arthritis, multiple sclerosis and respiratory diseases. Length of time with the illness ranged from 3 months to greater than 10 years. Data was collected and simultaneously analyzed over a 3-year period using a grounded theory approach. However, it is unclear whether multiple interviews were conducted with each informant in order to trace the evolution of relationships with health care providers or whether an informant retrospectively described health care relationships during one interview.

One core variable, reconstructed trust, recurred frequently, linked various data components, and explained variation in the data. Evolution of doctor-patient relationships in chronic illness followed a three-stage process: naive trust, disenchantment and guarded alliance. Naive trust in the physician was inevitably shattered by unmet expectations and the conflicting perspectives of doctor and patient. There followed a period of disenchantment characterized by

extreme anxiety, frustration, confusion and profound distrust. The resolution stage, called "guarded alliance" by the authors, was characterized by four categories of relationships: hero worship, resignation, consumerism and team playing.

Hero worship allowed informants to defer decision-making to the health care professional. In relationships characterized by resignation, patients felt powerless and many withdrew from involvement with health care professionals. In consumerist relationships, informants participated in order to obtain essential services, asked questions, became manipulative and noncompliant, and became well informed about the illness and the health care bureaucracy. Consumerist informants had considerable control over management of the illness but were burdened with the weight of responsibility for the quality of their lives. Relationships characterized by team playing involved a negotiated alliance between informants and health care professionals. They utilized the expertise of the professional but applied their own knowledge and values to the decision-making process. The essential ingredient in team playing was reciprocal trust between doctor and patient.

Most informants engaged in multiple relationship types over time, and many simultaneously participated in different types of relationships with various health care providers. Informants who had been ill for a longer time period and those with access to support groups and other sources of information were more likely to trust in their own competence to make decisions.

Waitzkin, H. (1991). *The politics of medical encounters: How patients and doctors deal with social problems*. New Haven CT: Yale University Press.

Waitzkin argued that a progressive doctor-patient relationship fosters social change. However, most physicians fail to address a patient's underlying concerns which largely stem from the social context in which the patient operates such as the family or workplace. When contextual issues arise in medical encounters, doctors convey messages of ideology and social control that reinforce the existing social system.

Waitzkin based his arguments on the tenets of Marxism and neo-Marxism, relying heavily on the work of Gramsci, Lukacs, Althusser, and Habermas. He also referred to Foucault, Marxist literary critics, structuralists, and deconstructionists in developing his theory to describe and understand the medical encounter. Waitzkin argued that doctors focus patients in technical areas, directing their responses to objectified symptoms and treatments and away from the social issues that are causing their problems. He criticized medical education for teaching about pathophysiology and its treatment rather than social oppression. He noted class differences in language use and the hesitancy of working class patients to discuss social issues with physicians. When social issues arise, doctors interrupt and shift the conversation back to technical issues.

Waitzkin contended that social issues are contexts; economic, social and political conditions create personal troubles which patients bring to a medical encounter. The technical sequence of the encounter does not facilitate discussion of patients' troubles. Doctors try to manage contextual problems by fostering patient adjustment to their social roles, thereby reinforcing the status quo.

In order to verify his theory, Waitzkin relied on a random subsample (n=50) of audiotaped doctor-patient encounters collected in the 1970s. He presented a precise methodology for preparing transcripts. Some of the cases presented involved elderly patients.

Discussing examples from the Soviet Union, China and Cuba to show medical relationships he considered more progressive than those in the United States, Waitzkin suggested modifying patterns of power and finance to ensure regular employment, expanding public health and welfare benefits to include a national health program and providing equal opportunities regardless of race, gender or age. In short, doctors should let patients tell their own stories; they should provide full, comprehensible explanations; and patients should be more active in questioning and challenging physicians.

Wiederholt, J. B., Clarridge, B. R. & Svarstad, B. L. (1992). Verbal consultation regarding prescription drugs: Findings from a statewide study. *Medical Care*, *30*, 159-173.

Utilizing the 1984 Wisconsin Health Status Survey, the authors analyzed data from 2135 randomly selected respondents to a telephone interview survey who remembered when their last prescription was dispensed. All respondents were 18 years of age or older. After controlling for elapsed time since last prescription, log-linear analyses showed the importance of age as a correlate of consultation by prescribers (physicians and dentists) and pharmacy personnel. Other significant correlates were prescription status (new or refill) for consultation by pharmacy personnel and providers and sex of respondent for consultation by prescriber. Client education level did not significantly correlate with receipt of verbal consultation.

Reports of verbal consultation were coded to reflect any of six types of information received: name of medication, purpose, directions for use, side effects, possible drug interactions and general comments. Prescribers gave the purpose of medication and directions for its use to about 30% of the respondents who reported consultation. Only 10% of the respondents received verbal consultation by prescribers and pharmacy personnel for medications' side effects and possible drug interactions.

Although 24% of respondents reported no consultation for new prescriptions by prescribers, there was more reported consultation from prescribers than from pharmacy personnel. Prescribers provided less consultation to older age groups compared with younger, with a significantly lower rate of consultation occurring in the group aged 40-54. Pharmacy personnel also gave less consultation to older clients, but those receiving significantly less consultation were in the 55-75 and 75+ age groups. About 28% of respondents aged 55-75 reported no verbal consultation for their last prescription from either prescribers or pharmacy personnel. More women than men reported receiving no consultation.